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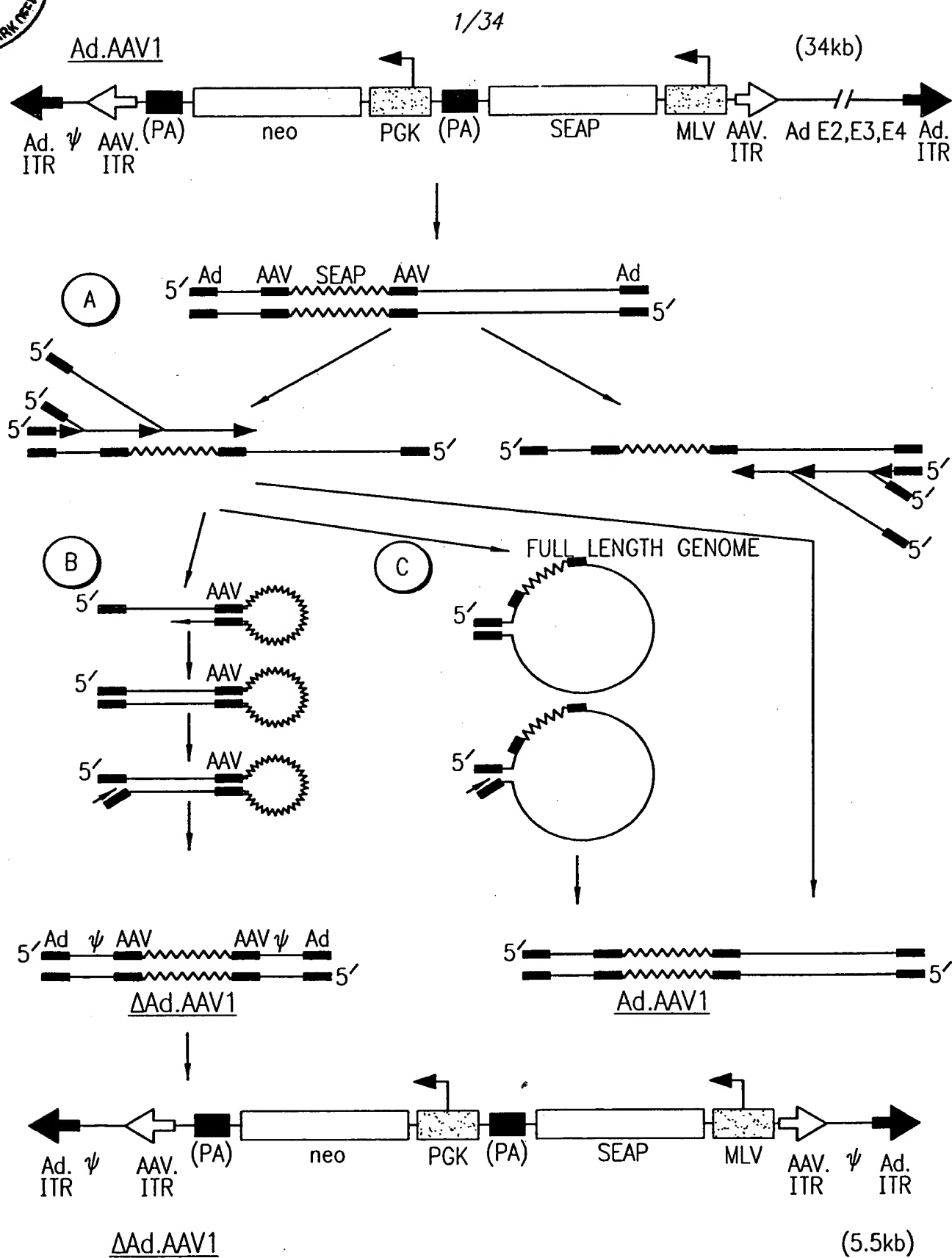
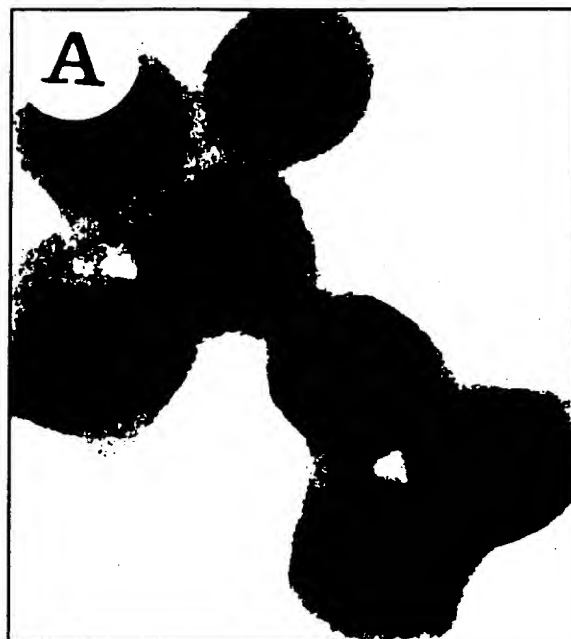


FIG. 1

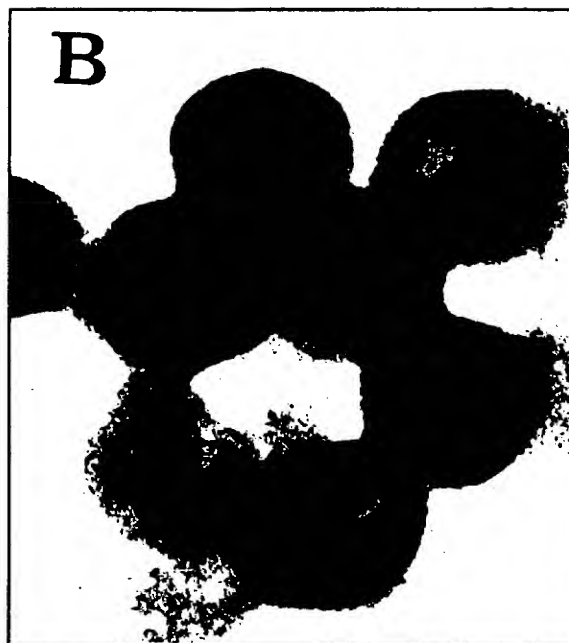
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Ad.AAV  
(33kb)



50nm

$\Delta$ Ad.AAV  
(5.5kb)



50nm

FIG. 2

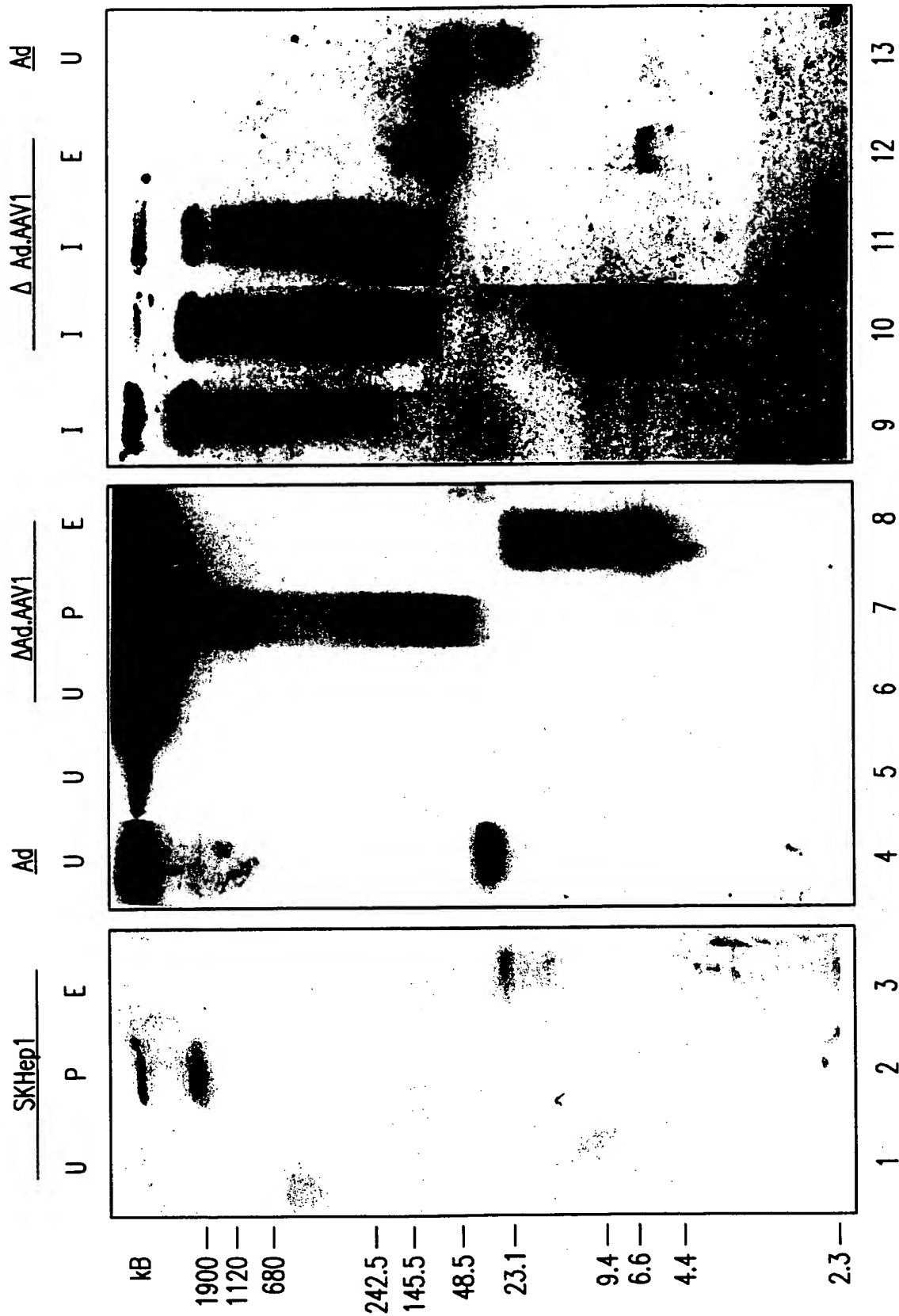


FIG. 3



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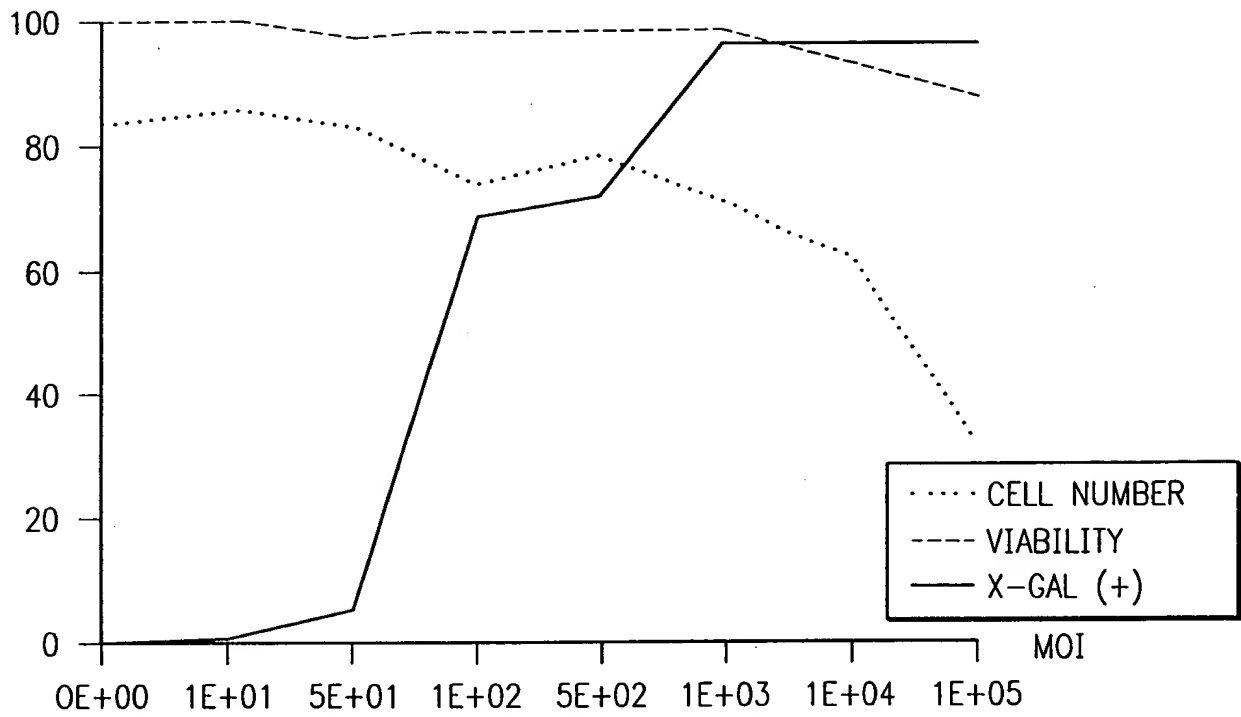


FIG. 4A K562

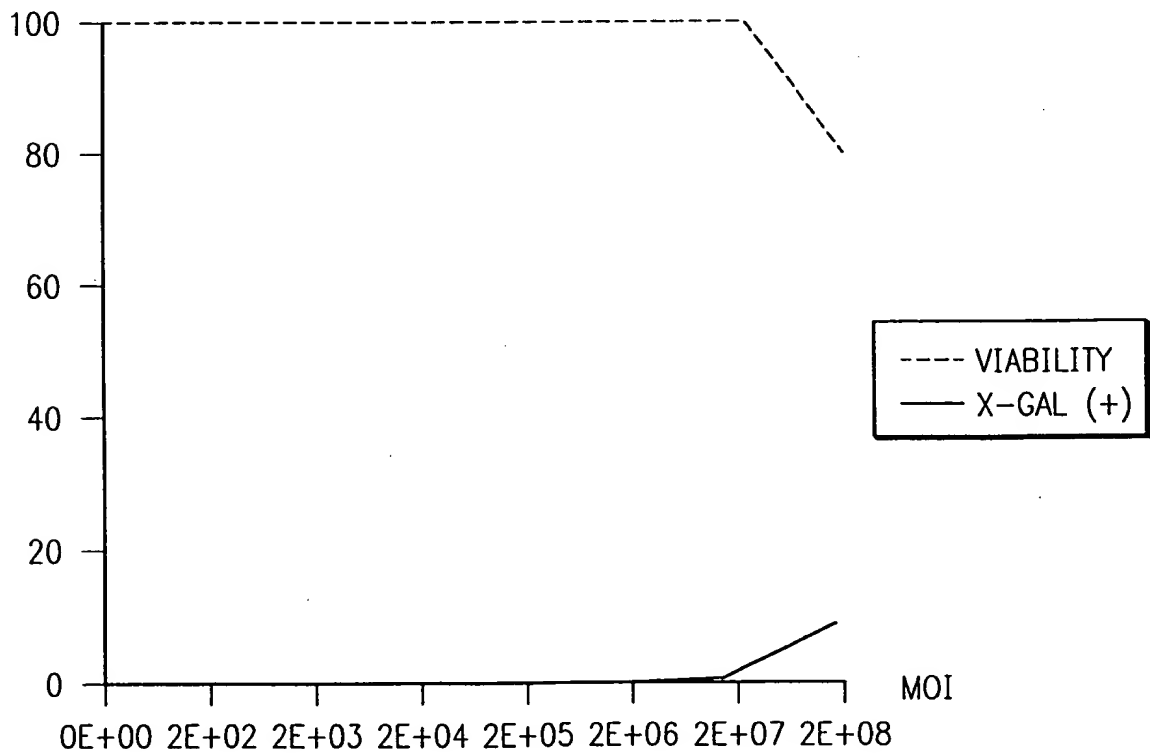


FIG. 4B CD34+

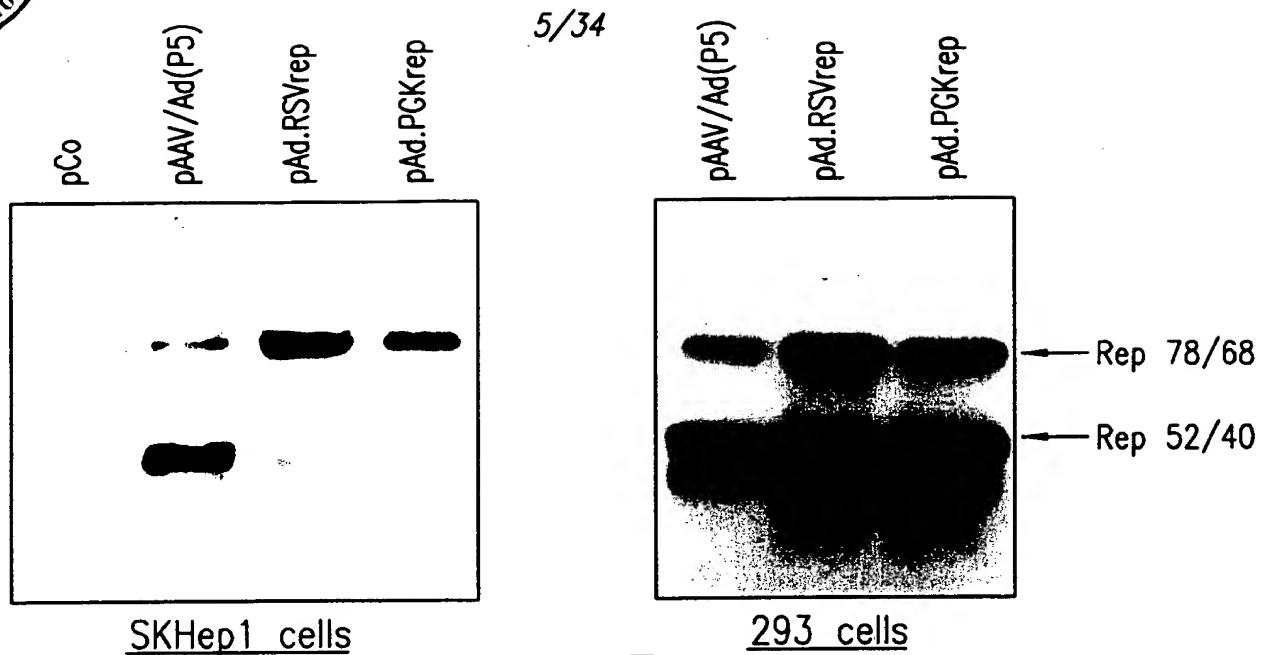


FIG. 5

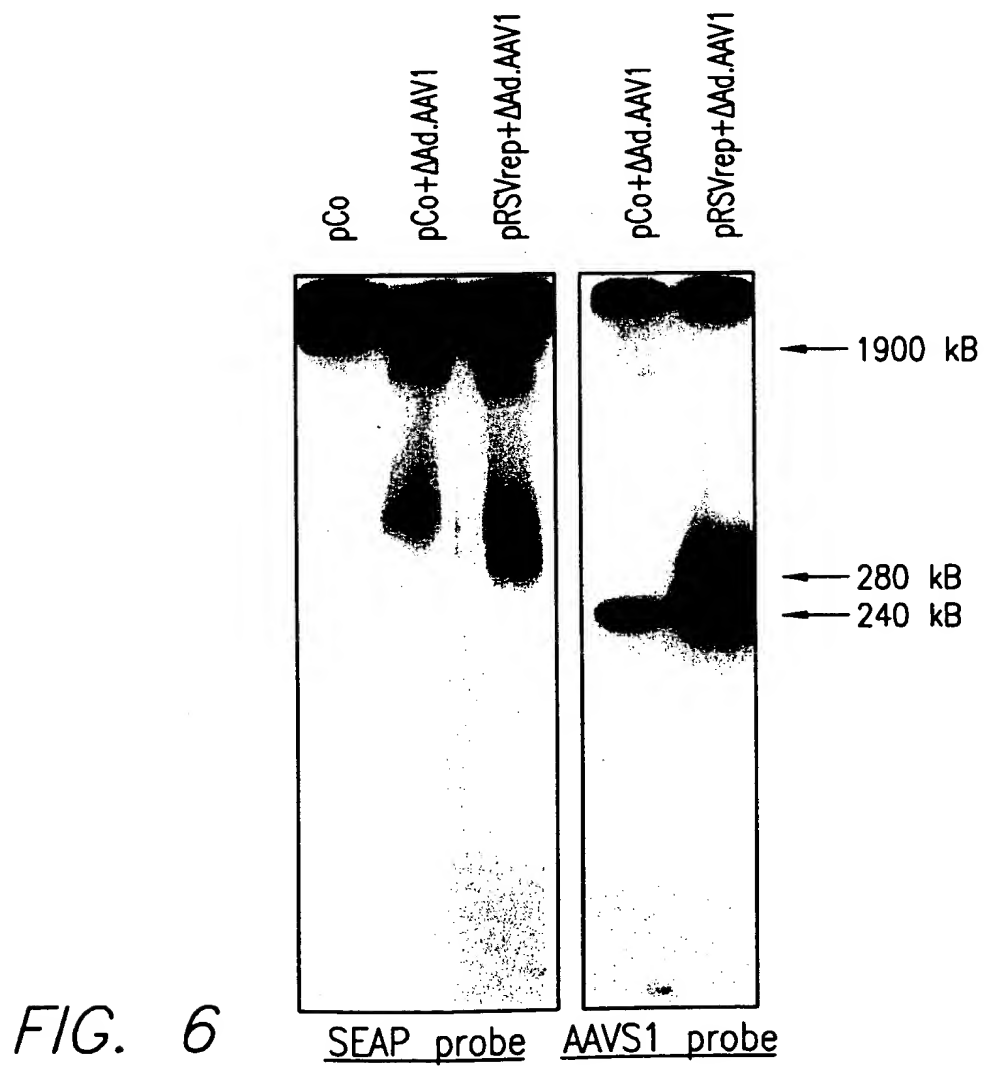
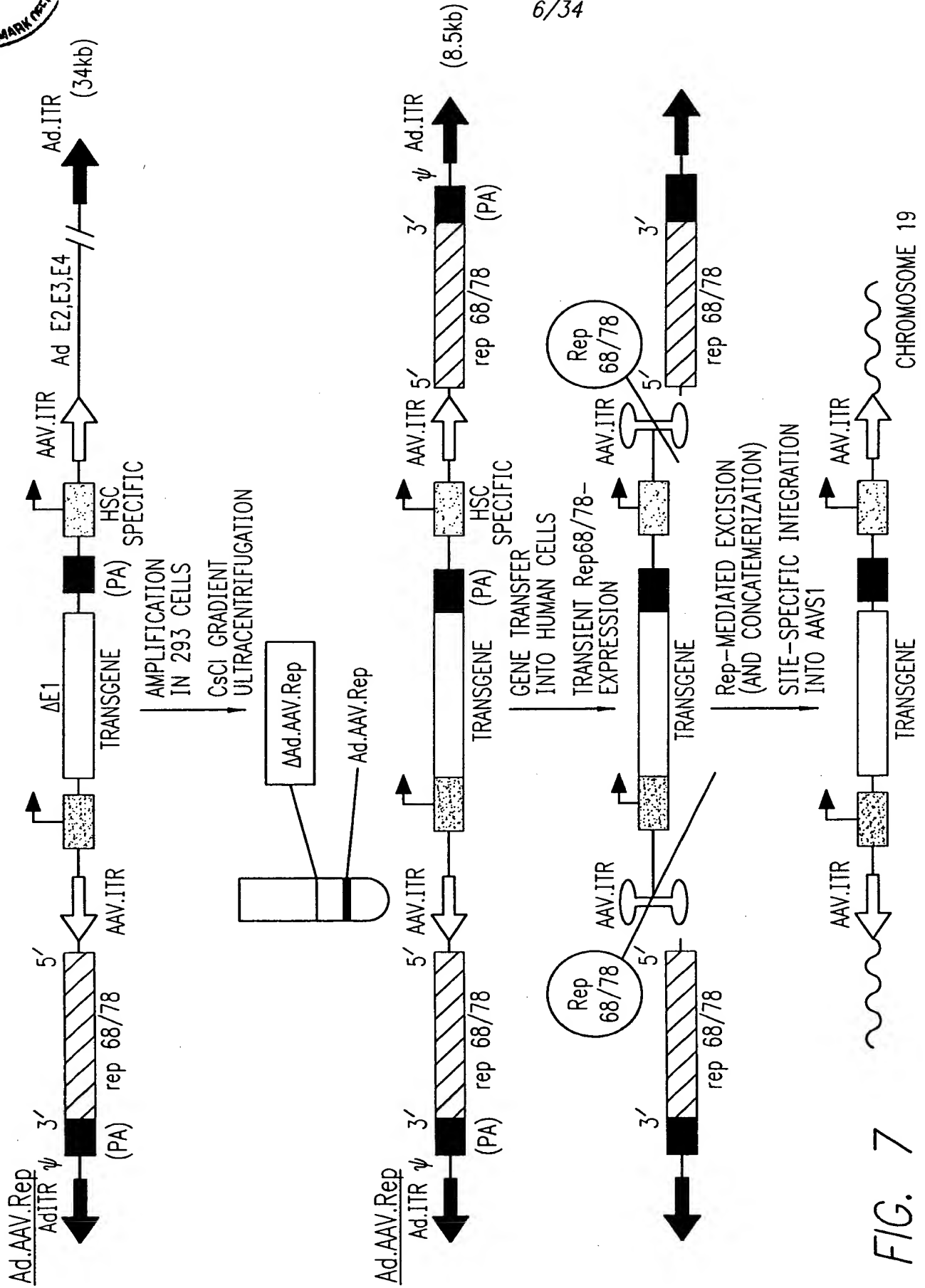
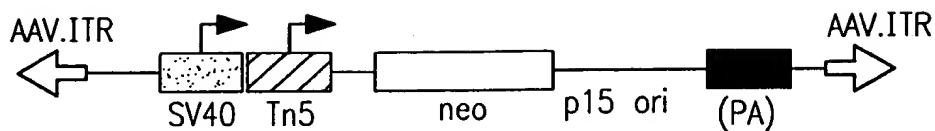


FIG. 6



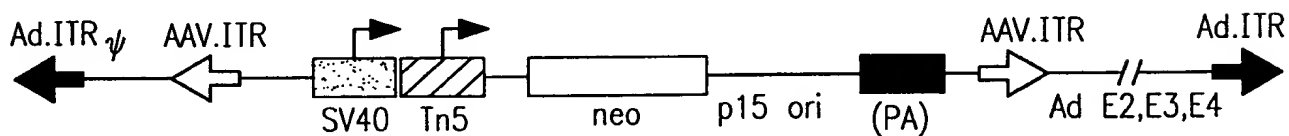
rAAV-SNori

3.5kb (ss)



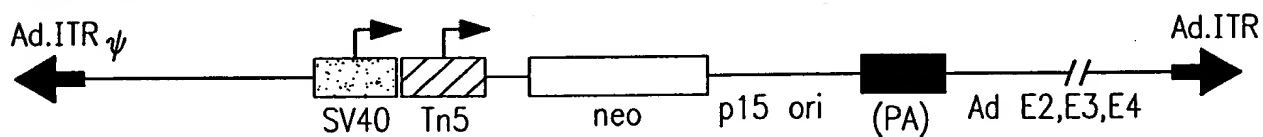
Ad.AAV-SNoriITR

35 kb (ds)



Ad.SNori

35kb (ds)



$\Delta$ Ad.AAVSNori

4.8kb (ds)

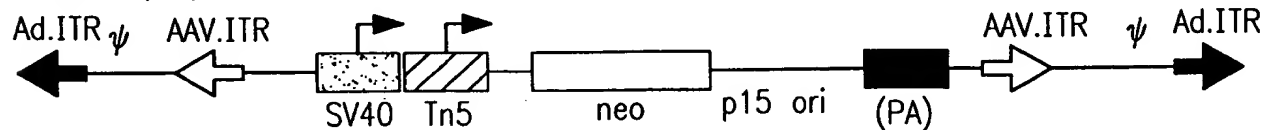


FIG. 8A



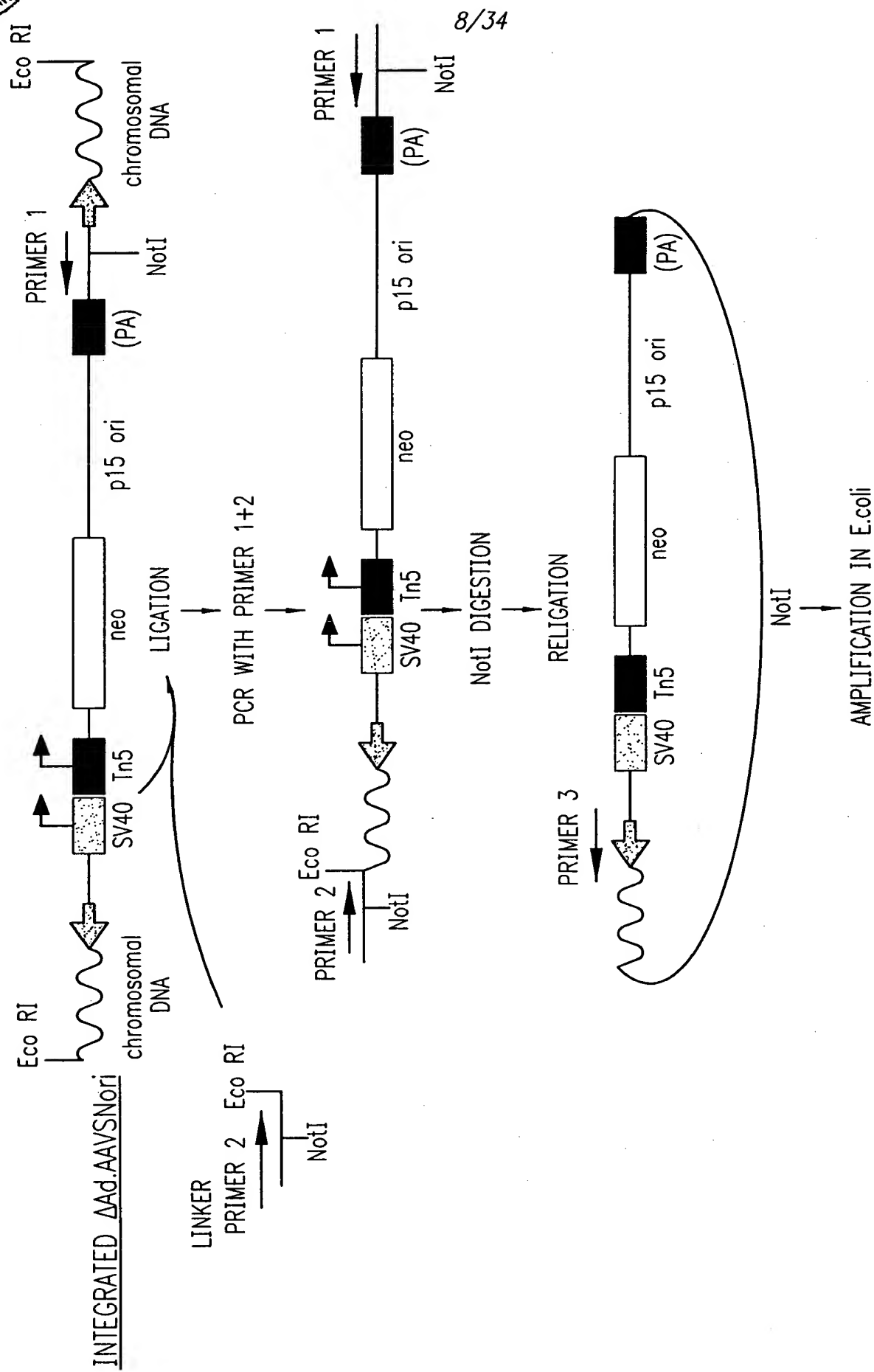


FIG. 8B

SEQUENCING OF CHROMOSOMAL DNA WITH PRIMER 3

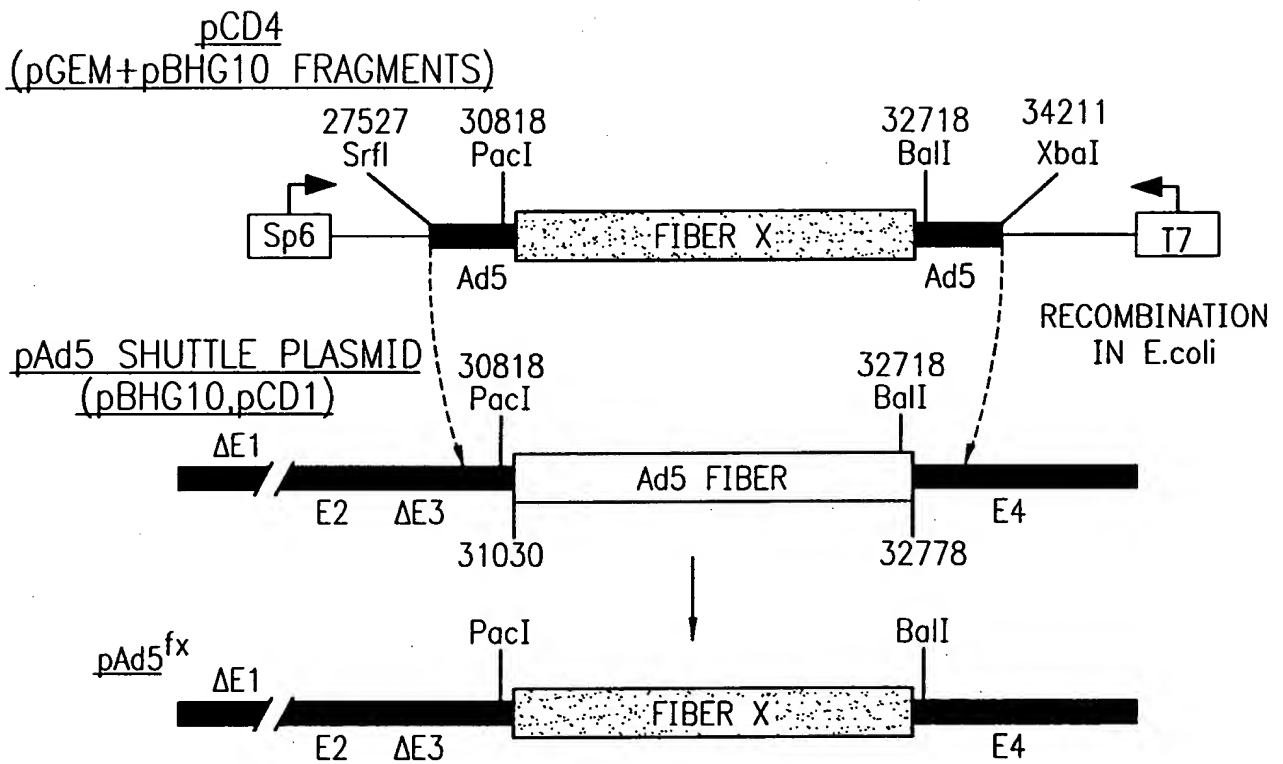
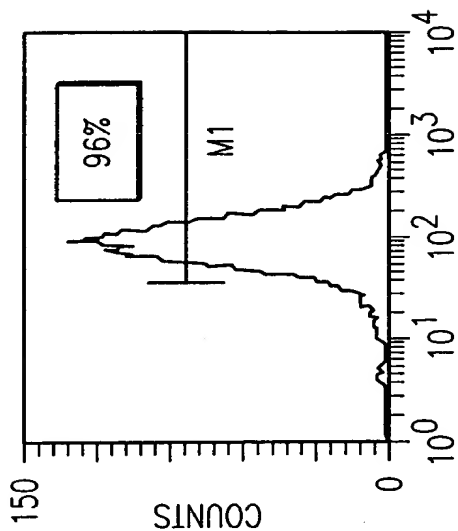
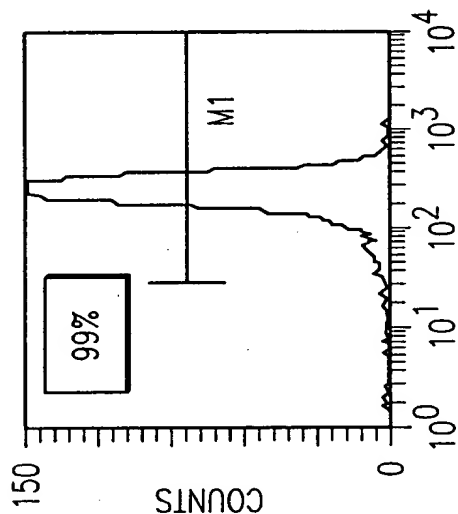


FIG. 9

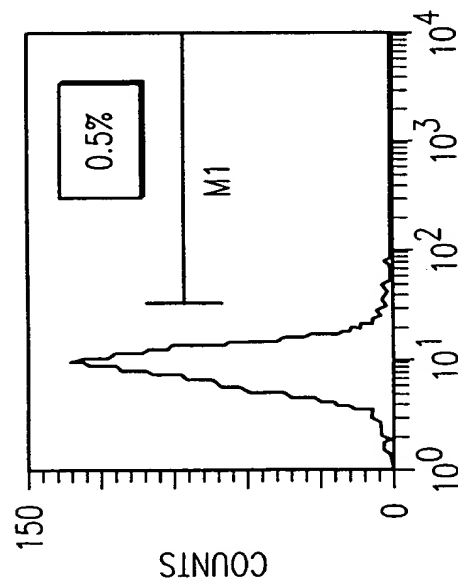
$\alpha_V$ - INTEGRINS



CAR

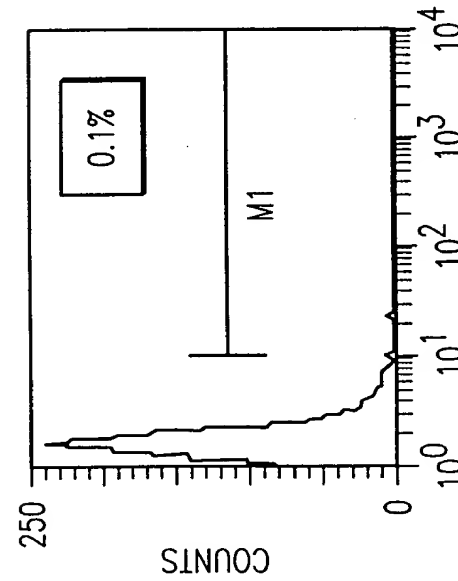
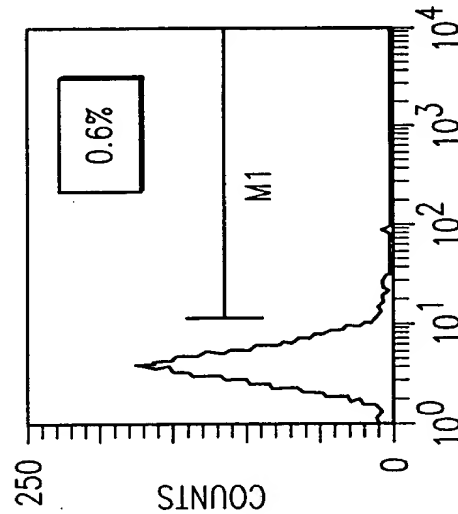
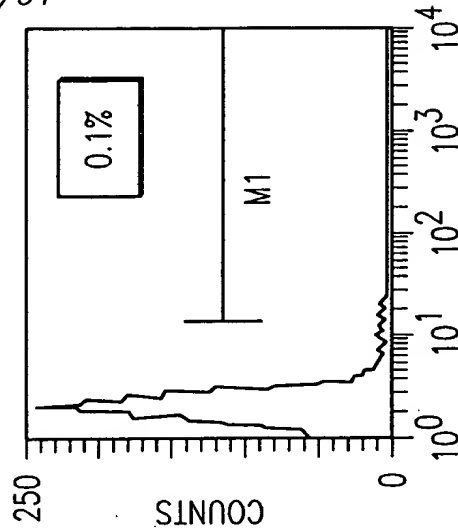


NEGATIVE CONTROL



HeLa

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CHO

FIG. 10-i



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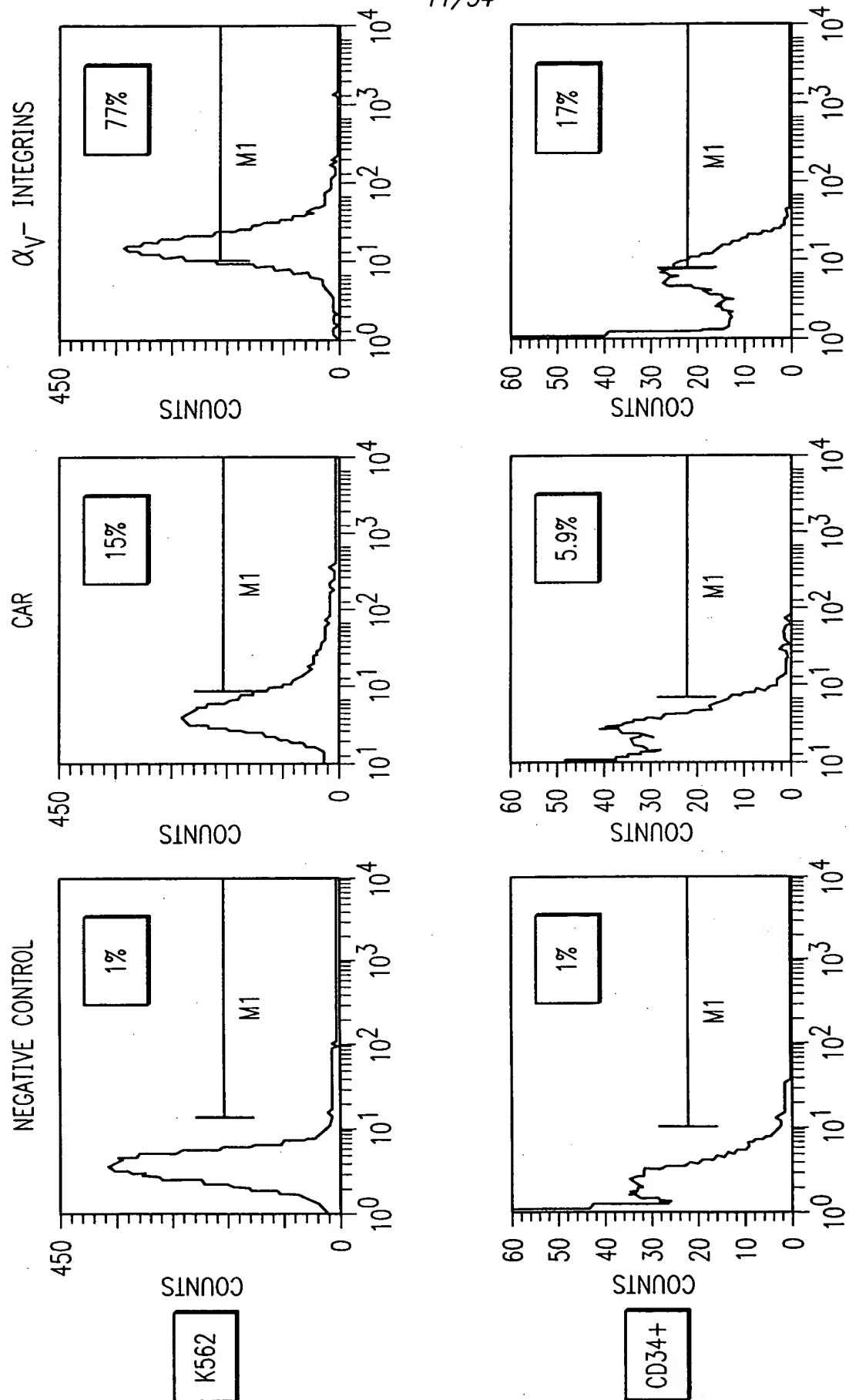
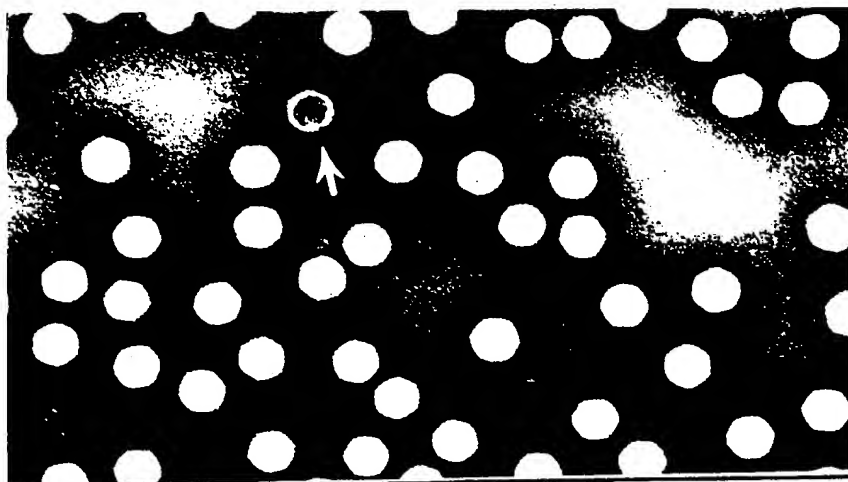


FIG. 10-ii



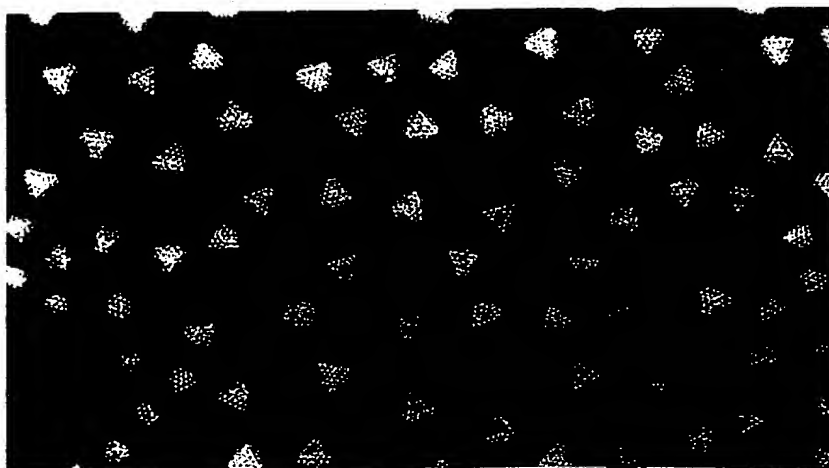
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Ad 35



Ad 9



Ad 5

FIG. 11

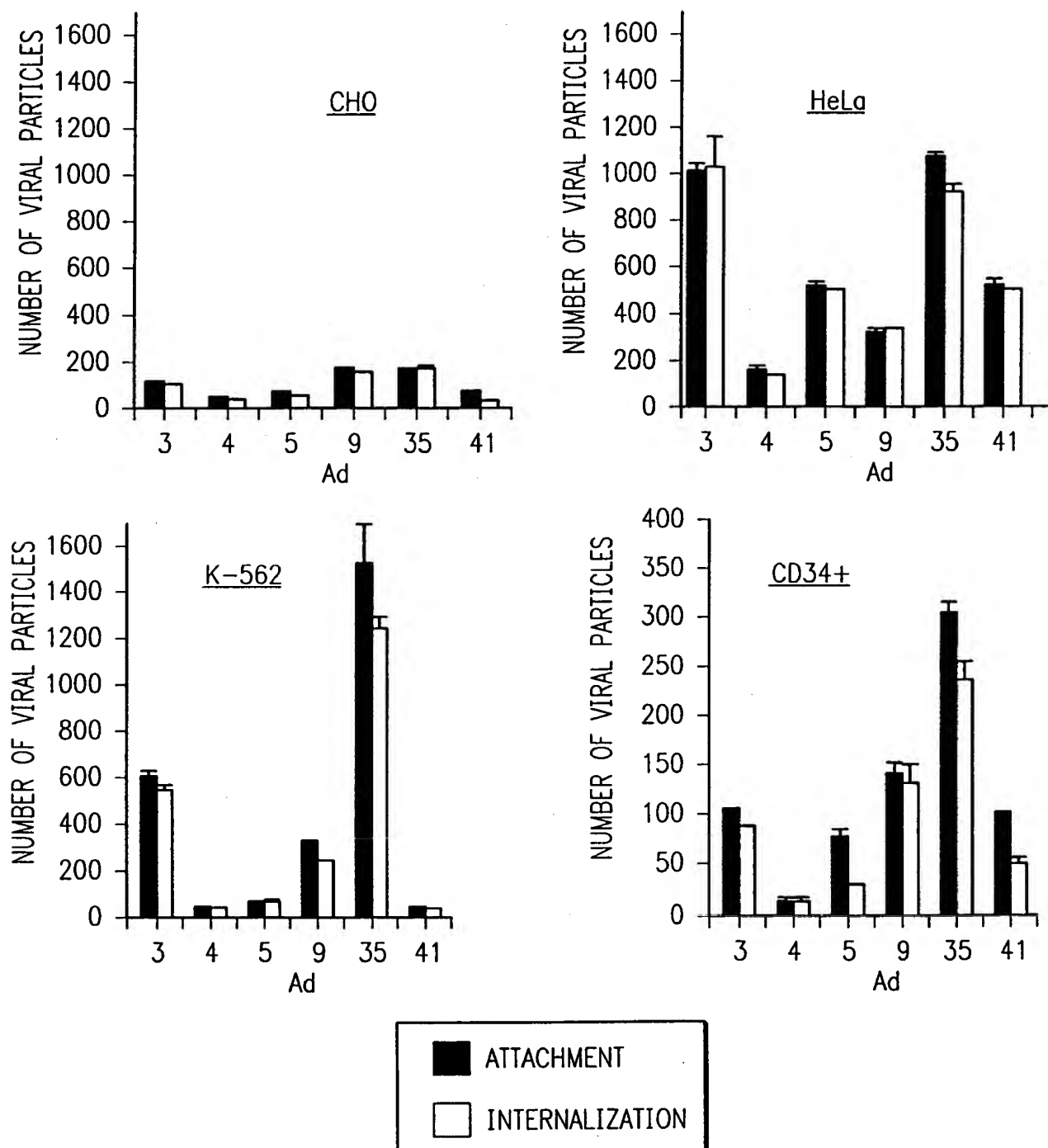
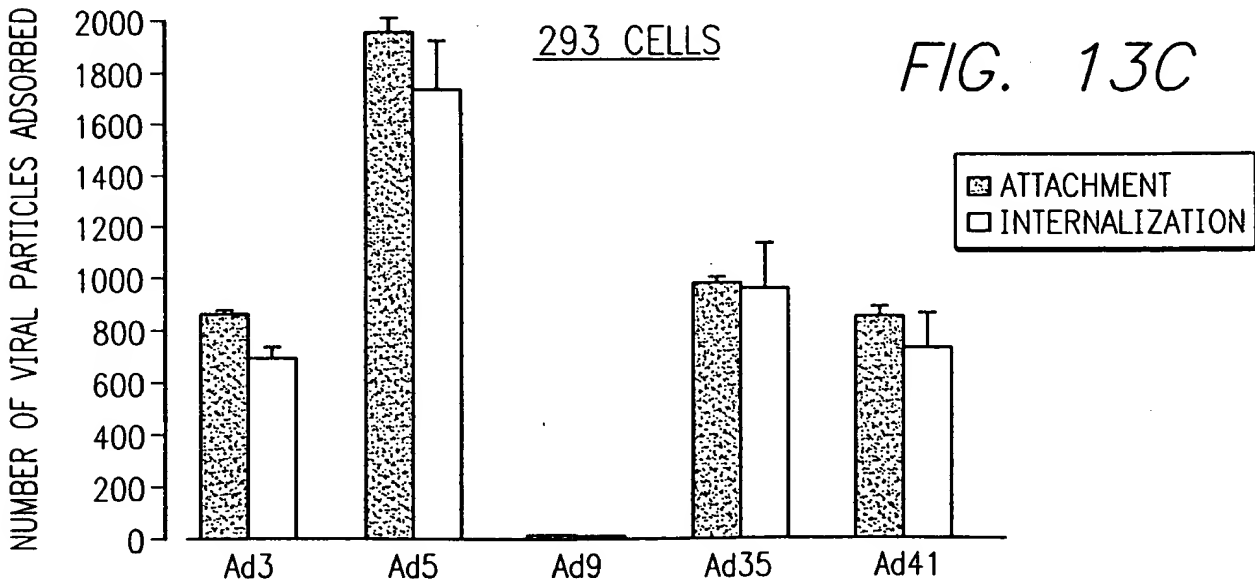
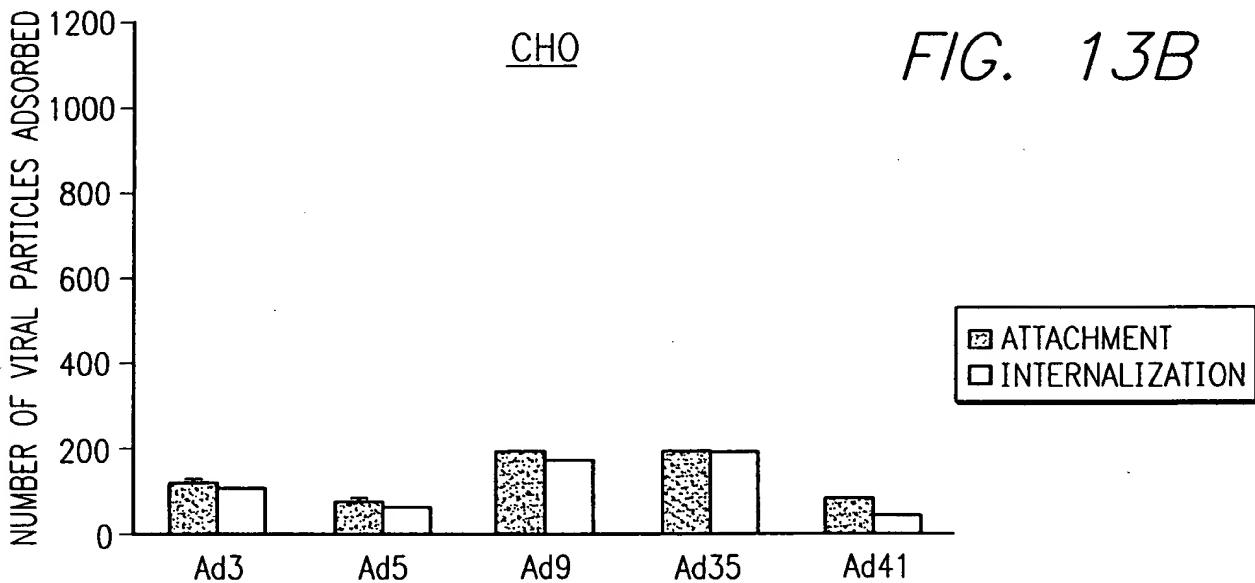
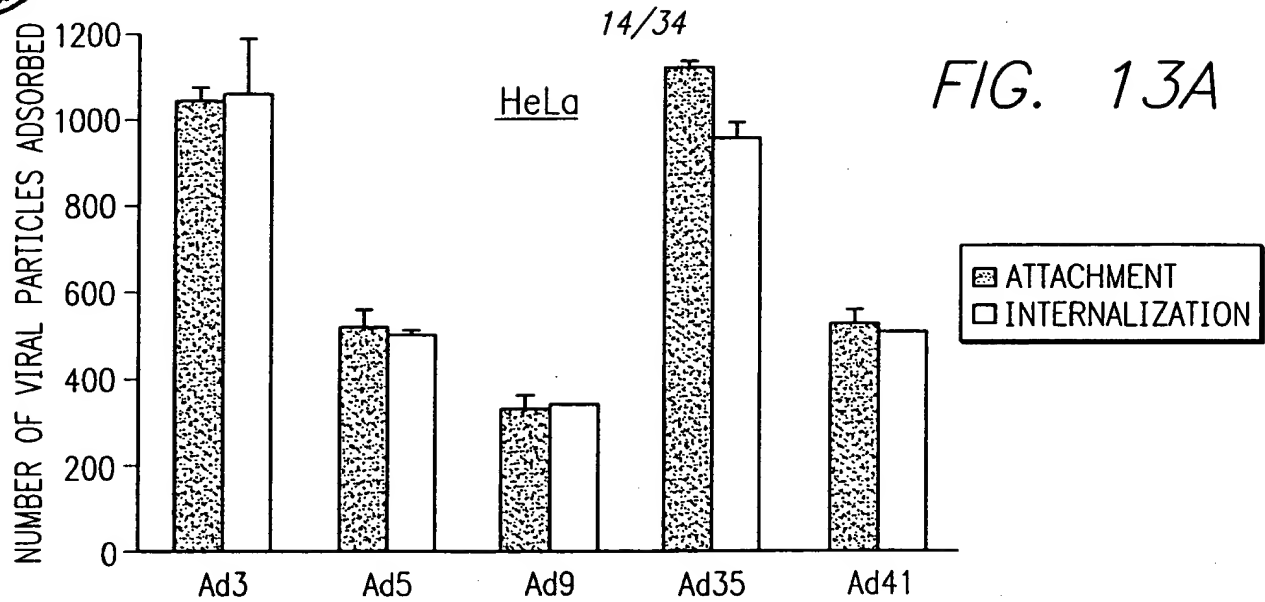


FIG. 12



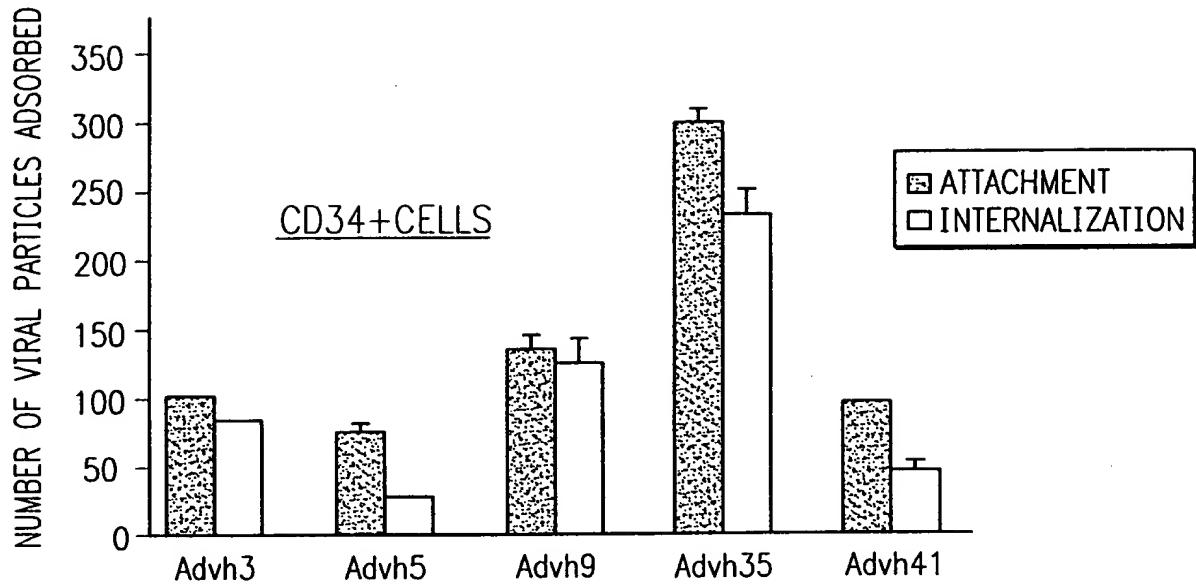


FIG. 14A

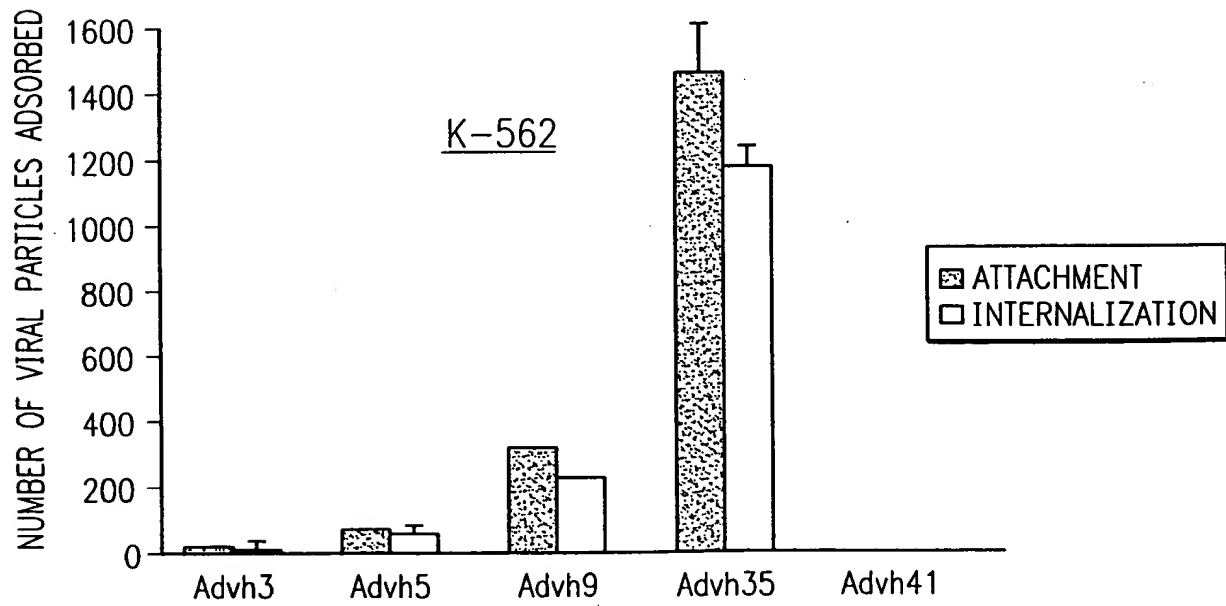


FIG. 14B



K562 cells

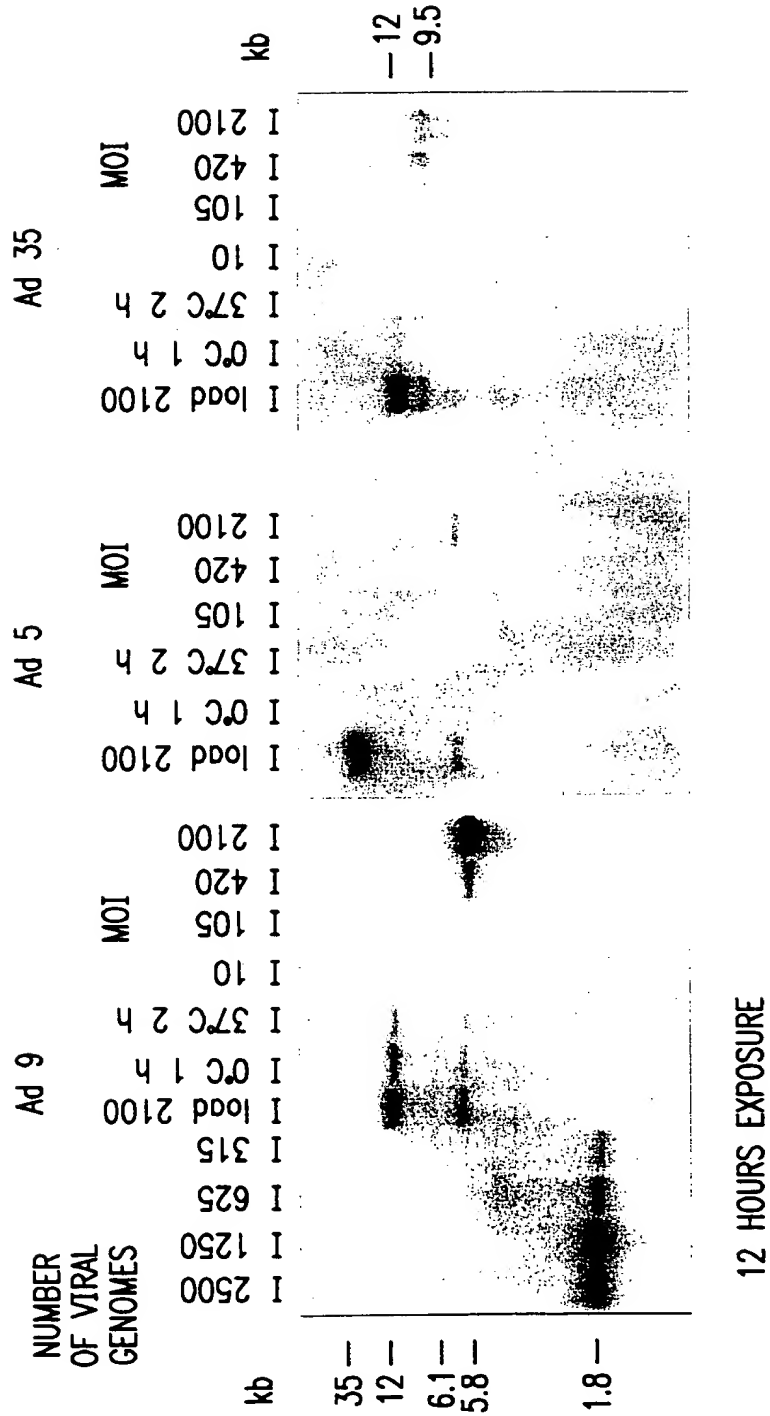


FIG. 15A

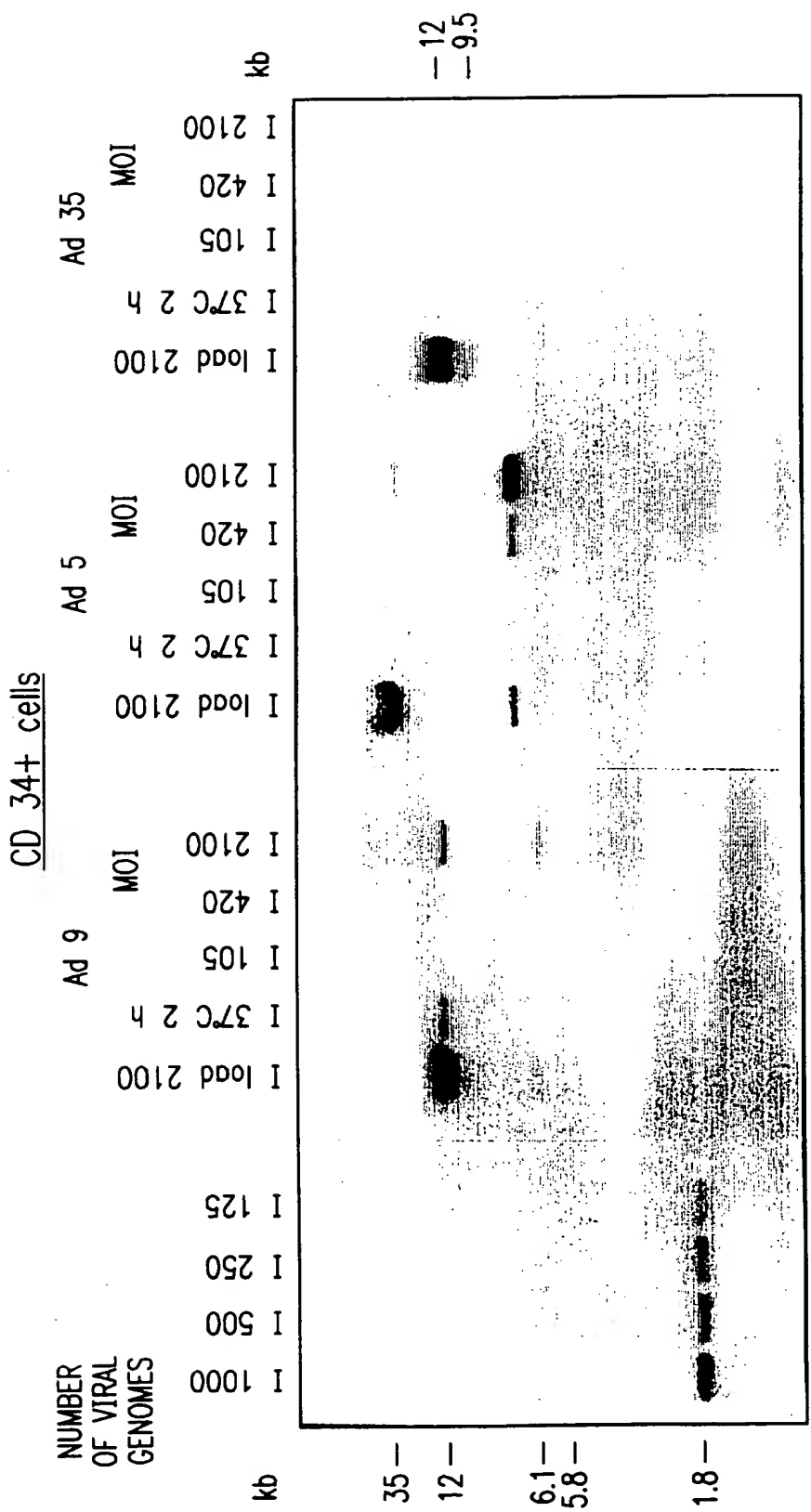


FIG. 15B

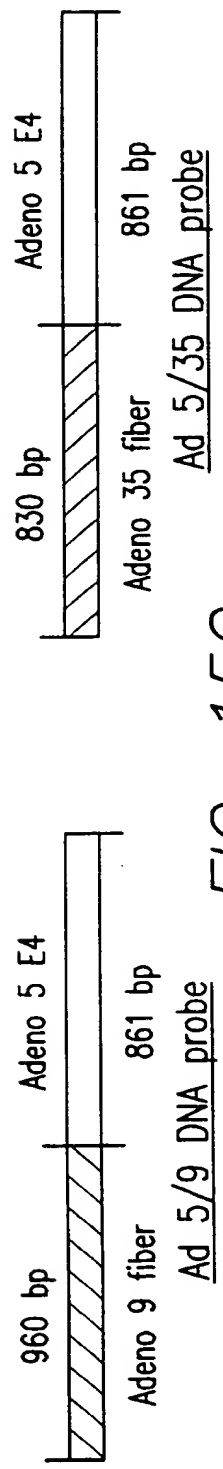


FIG. 15C

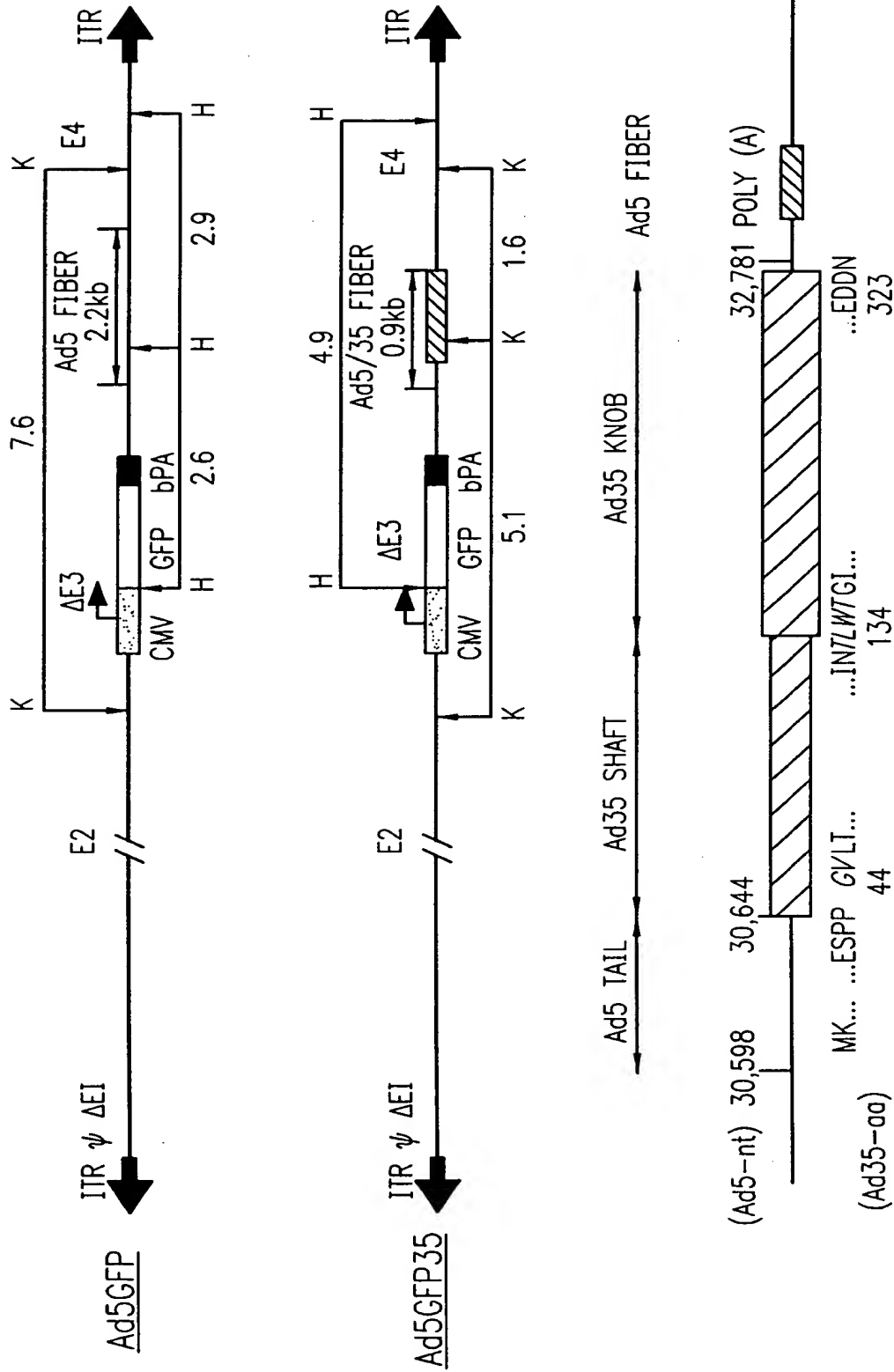


FIG. 16A

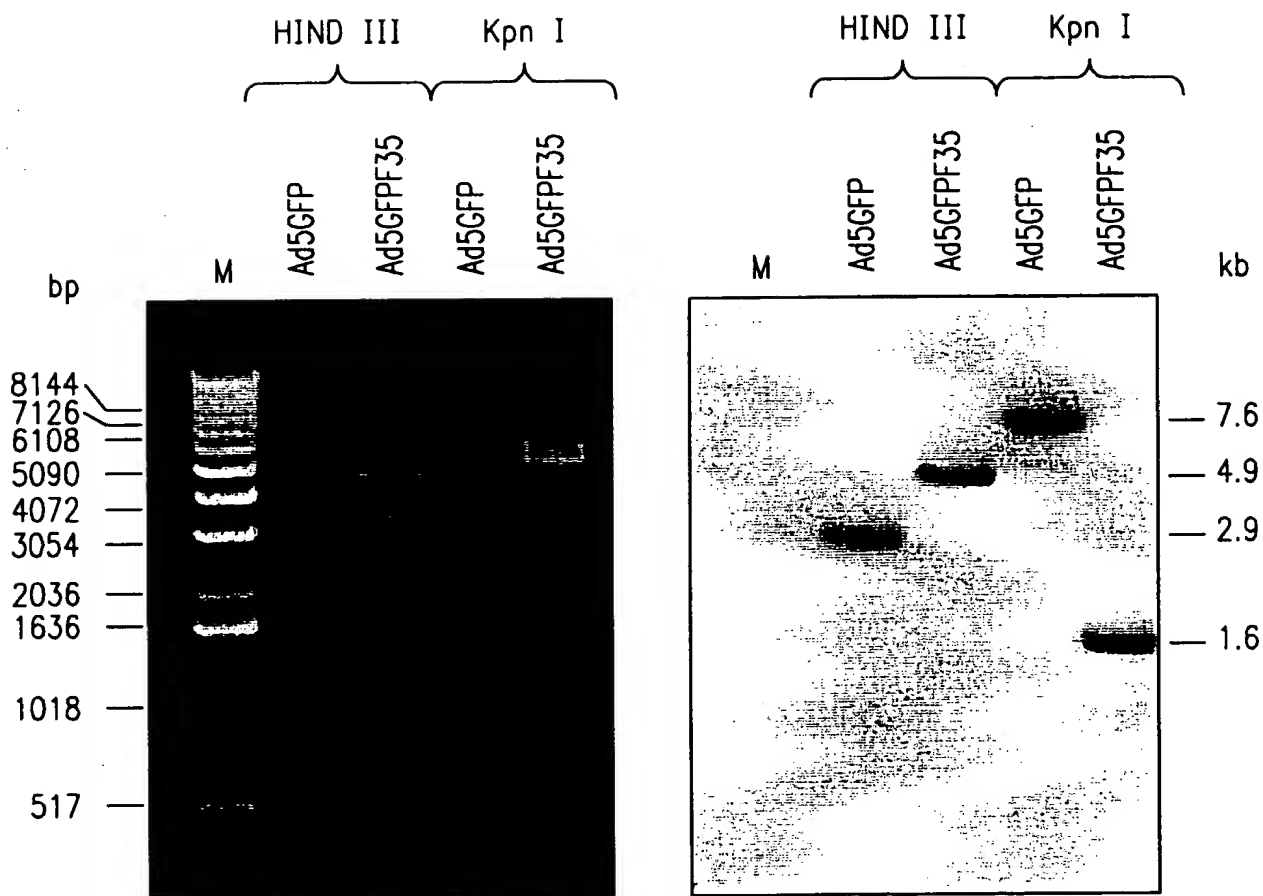


FIG. 16B

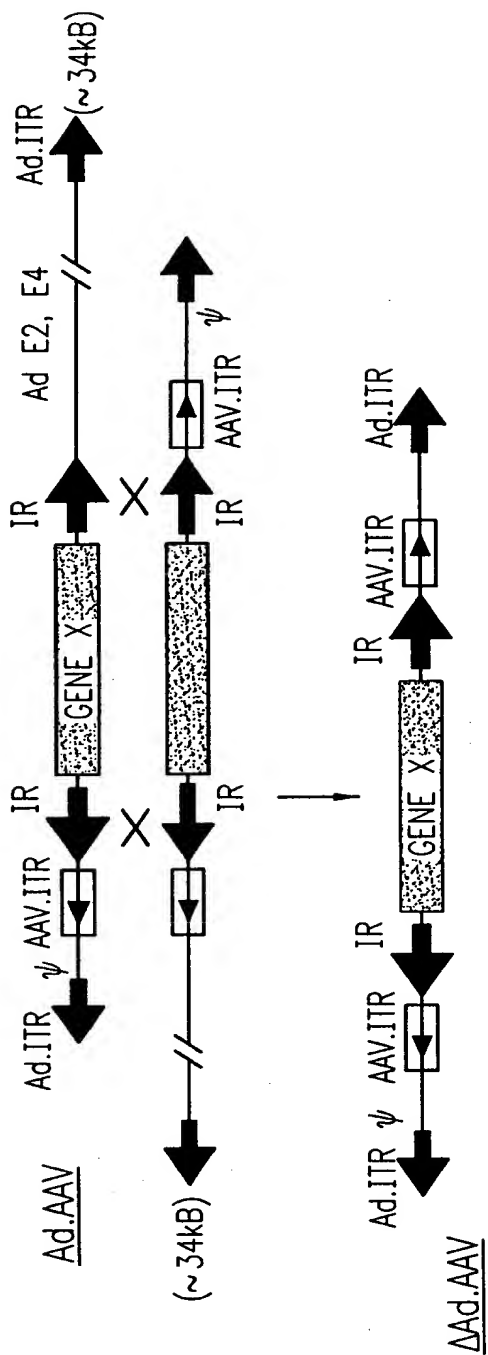


FIG. 17A

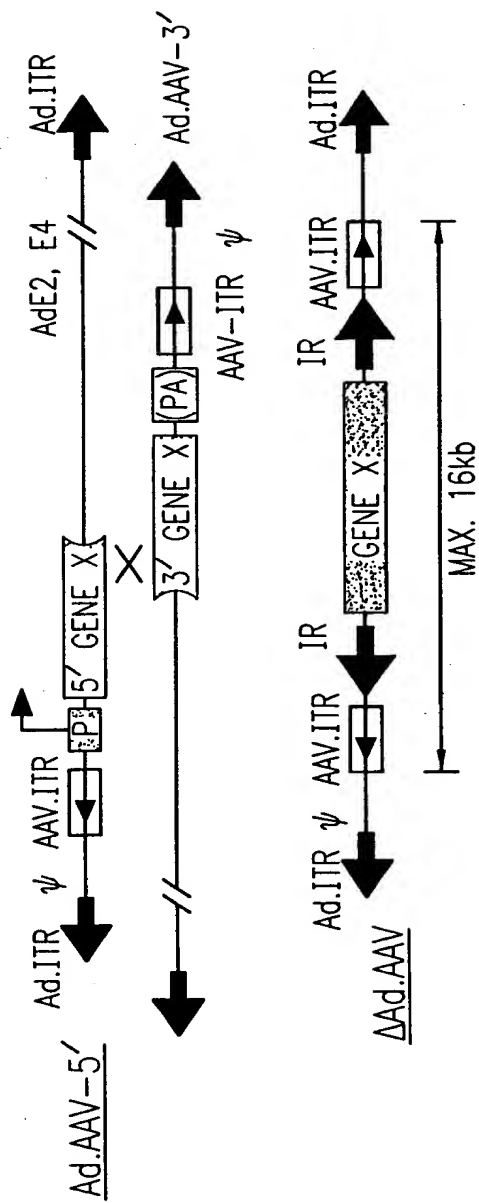


FIG. 17B

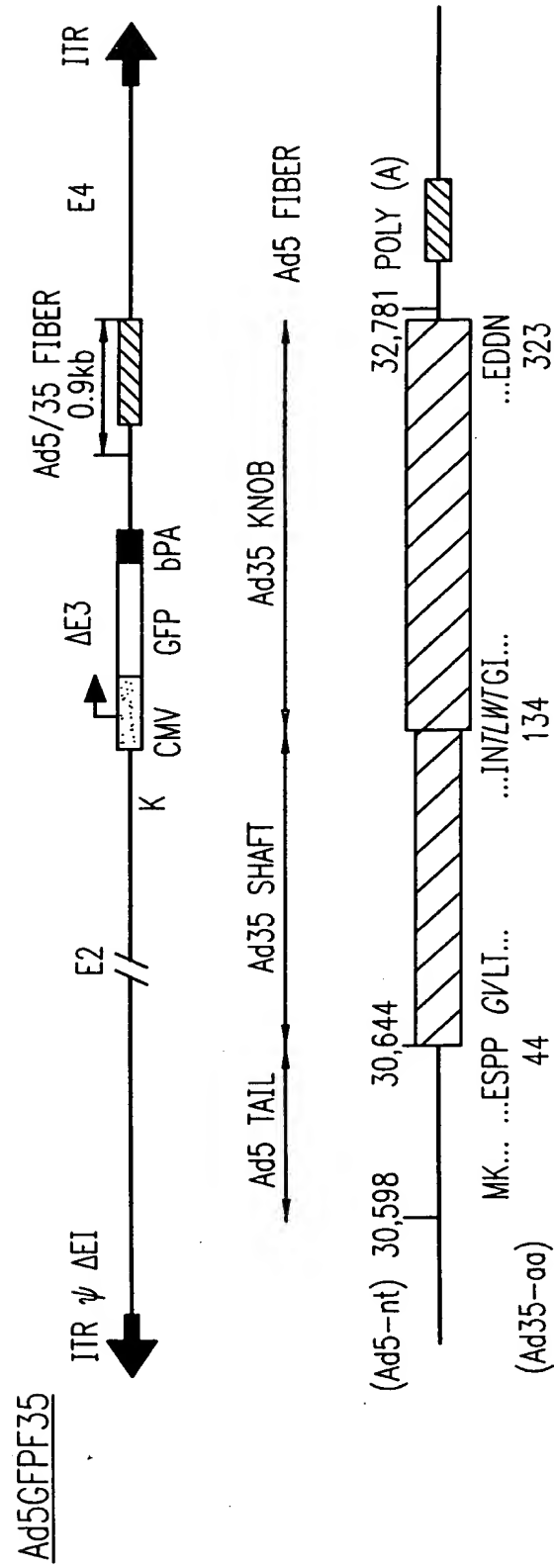


FIG. 18

■ CONTROL    □ Ad5GFP    ▨ Ad5GFPF35    ▩ Ad 35    ▪ Ad 3

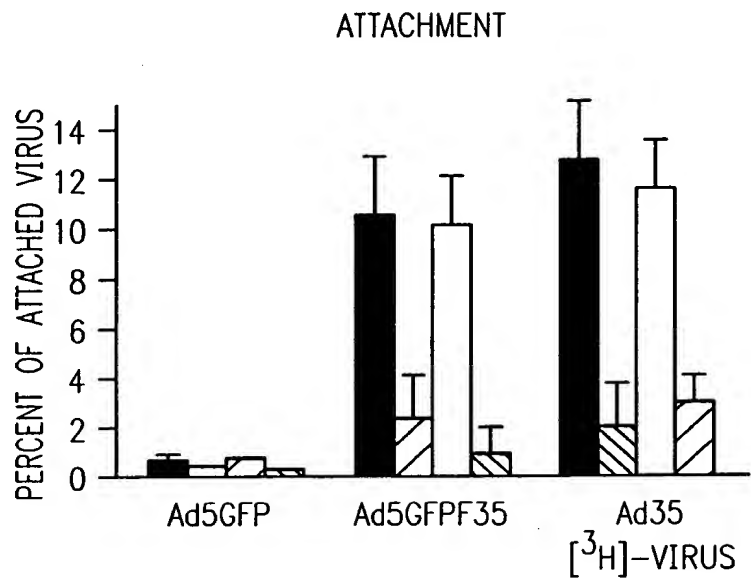


FIG. 19A

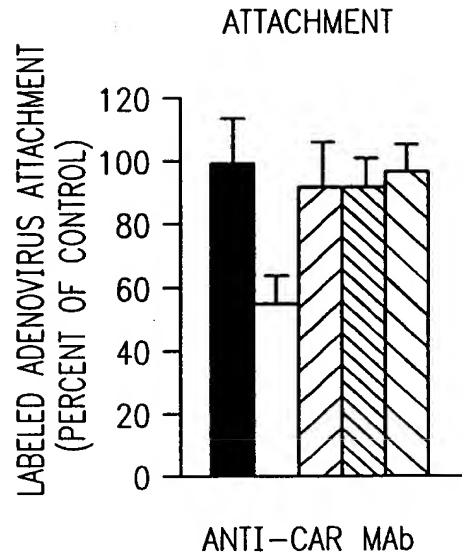


FIG. 19B

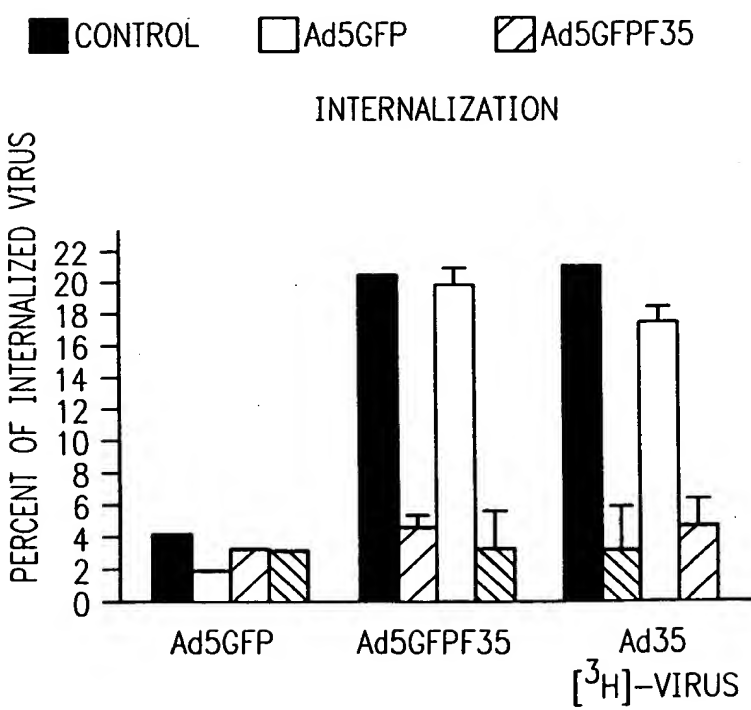


FIG. 19C

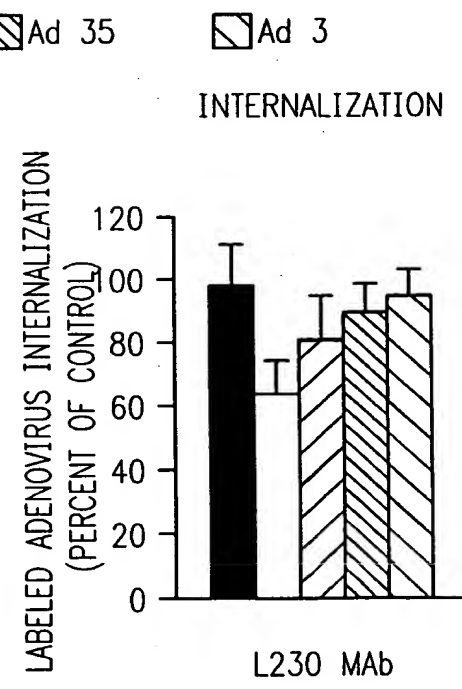


FIG. 19D

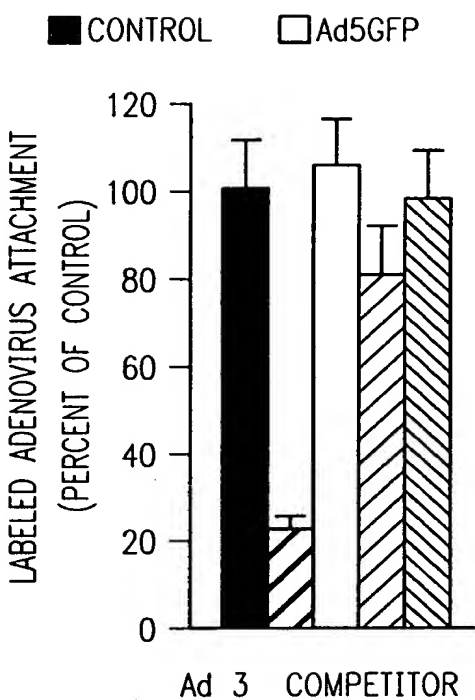


FIG. 20A

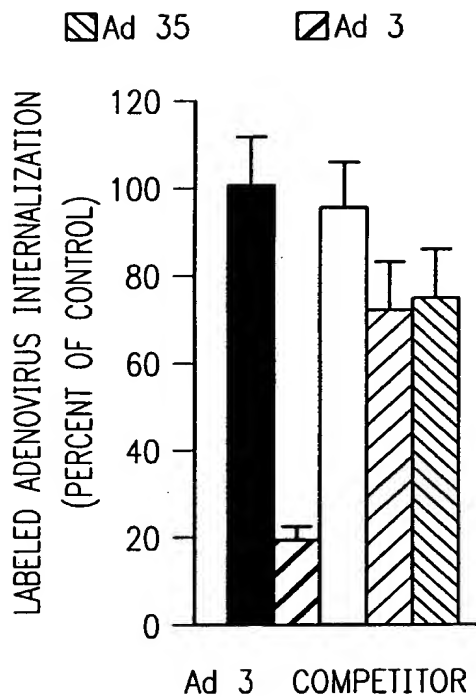


FIG. 20B

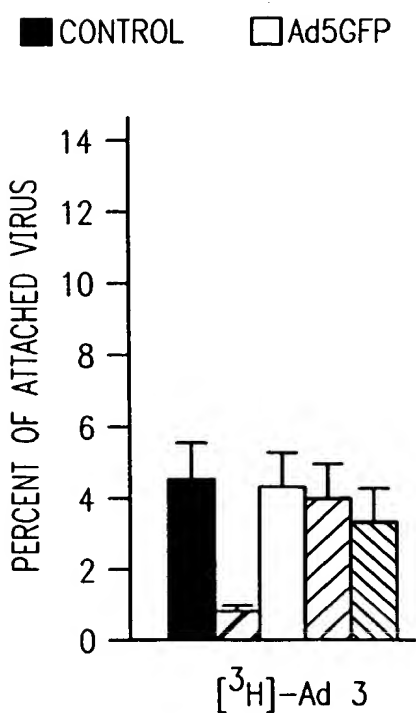


FIG. 20C

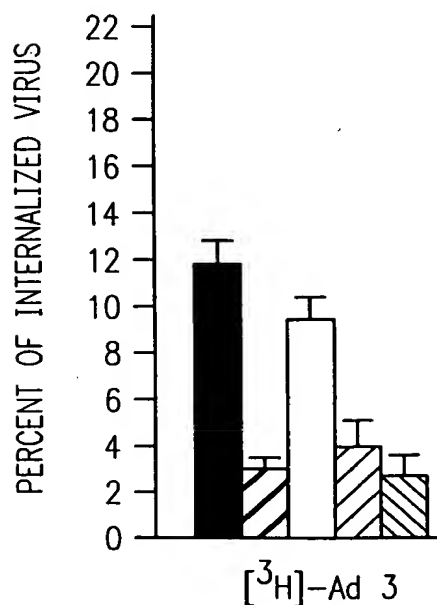


FIG. 20D



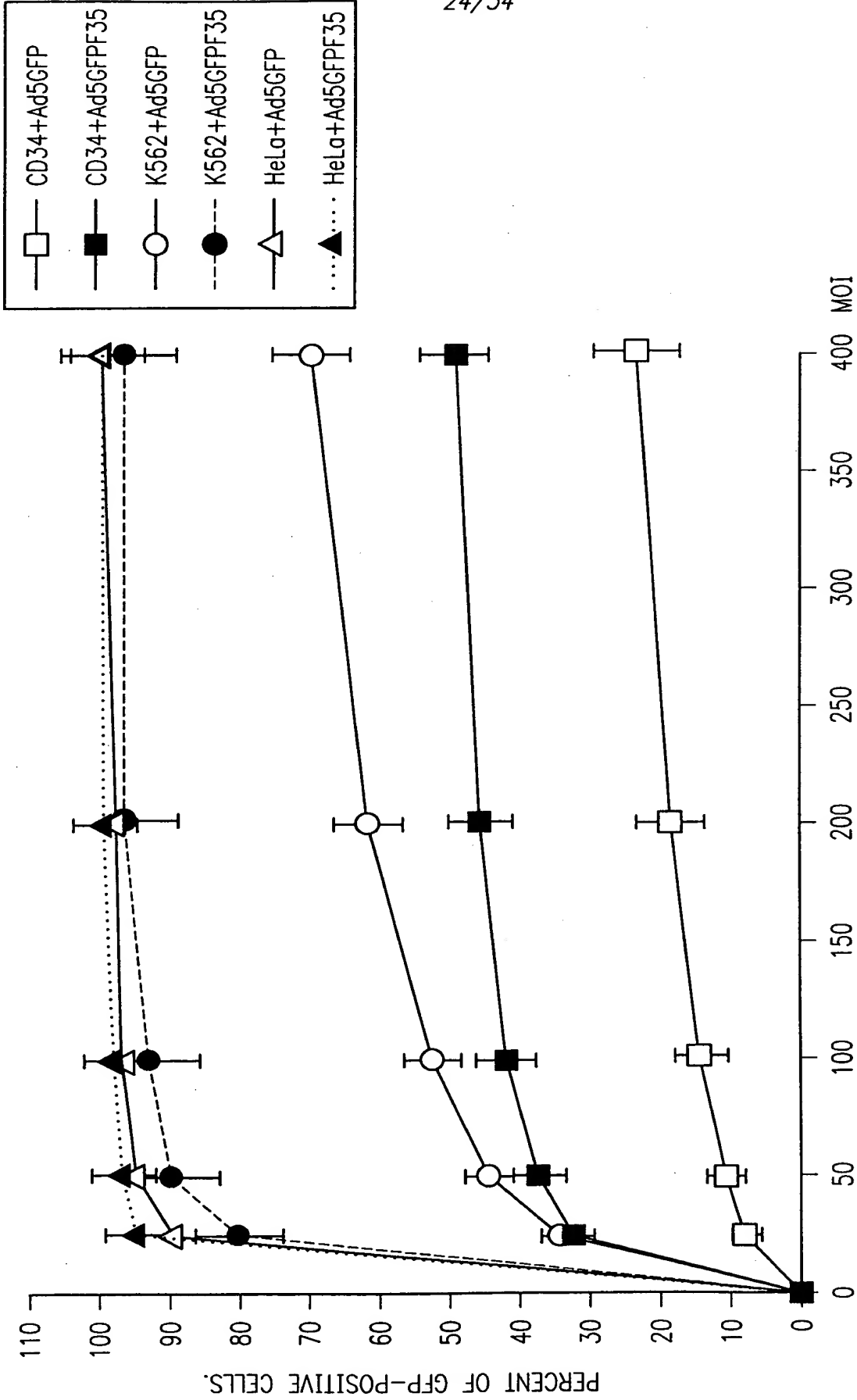


FIG. 21

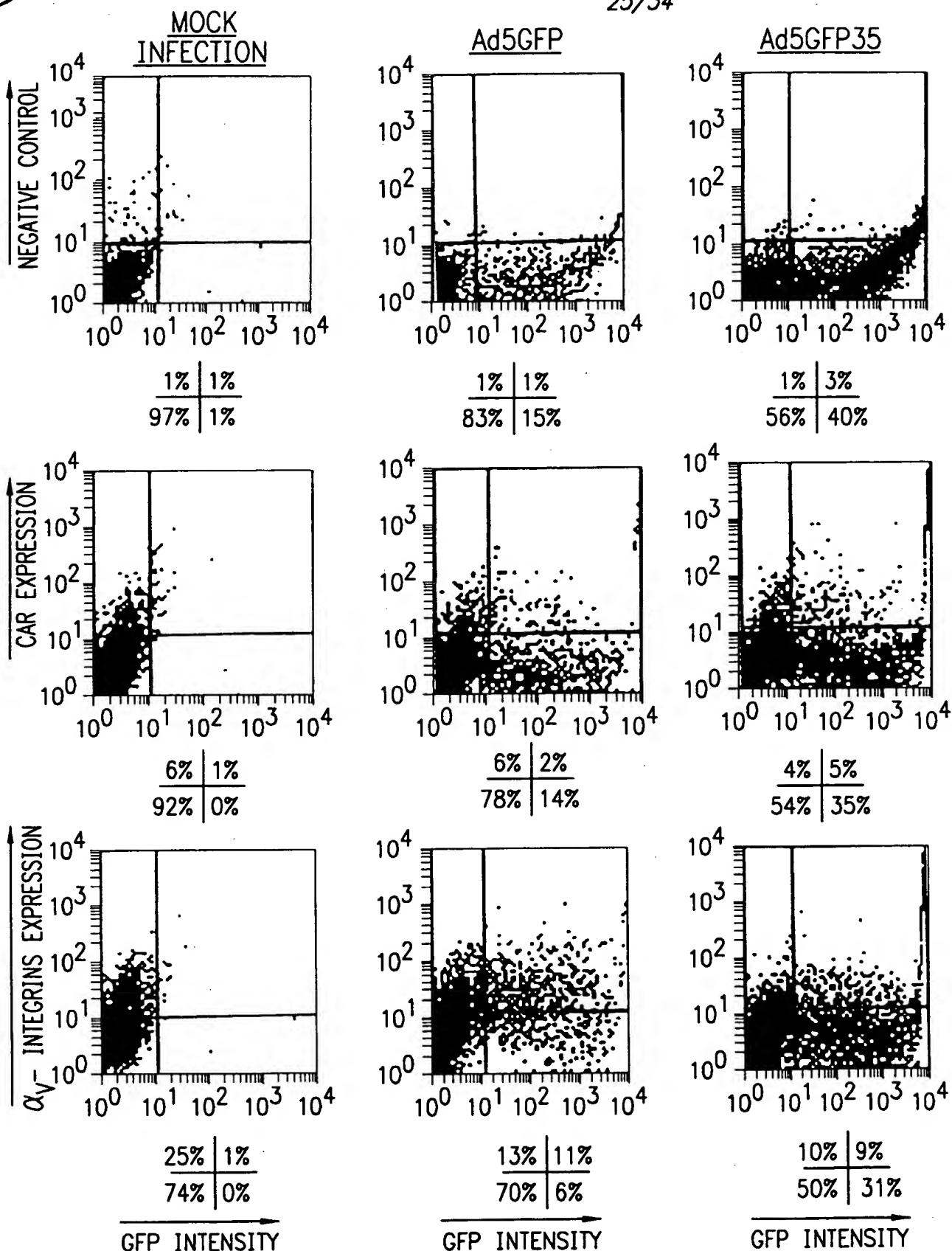


FIG. 22

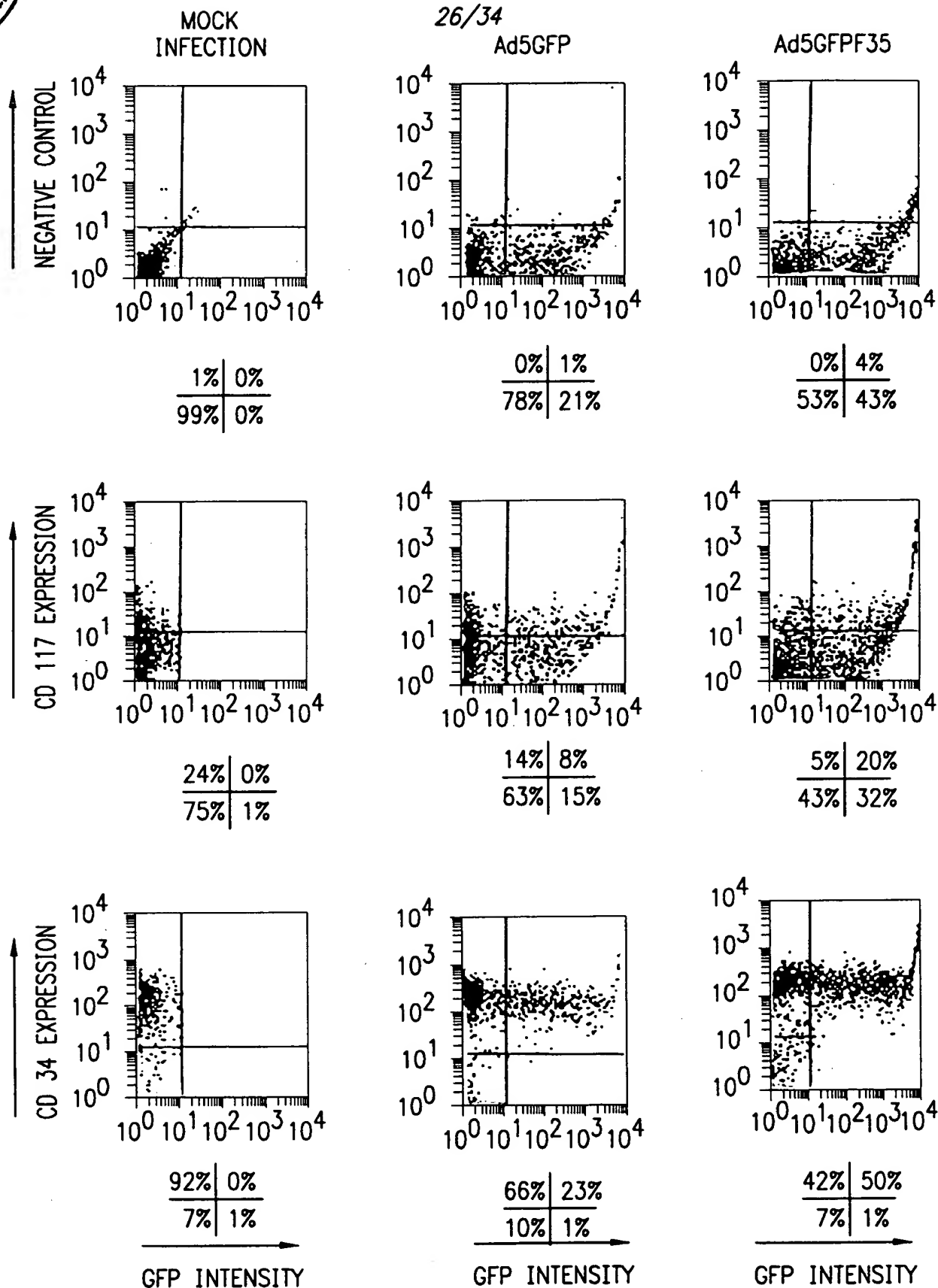


FIG. 23A

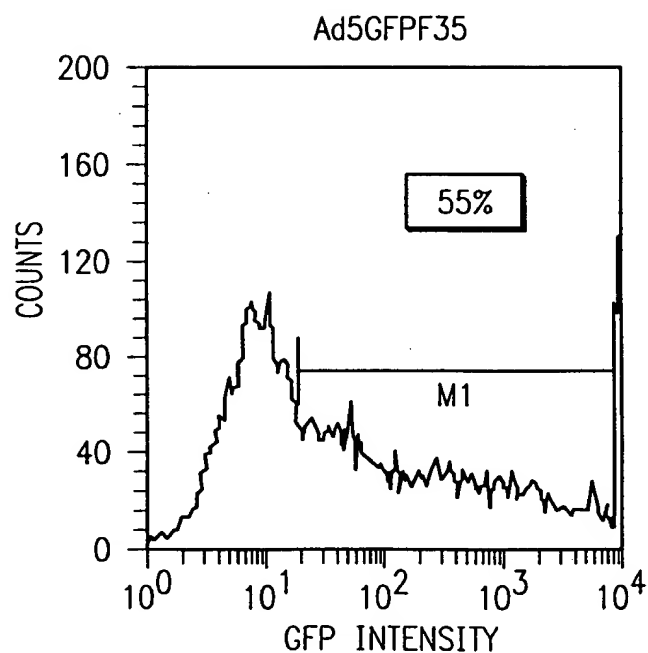
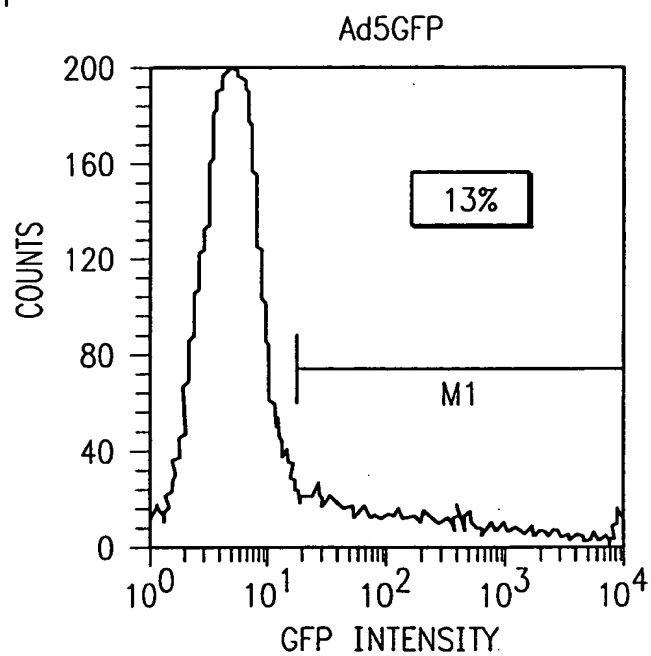
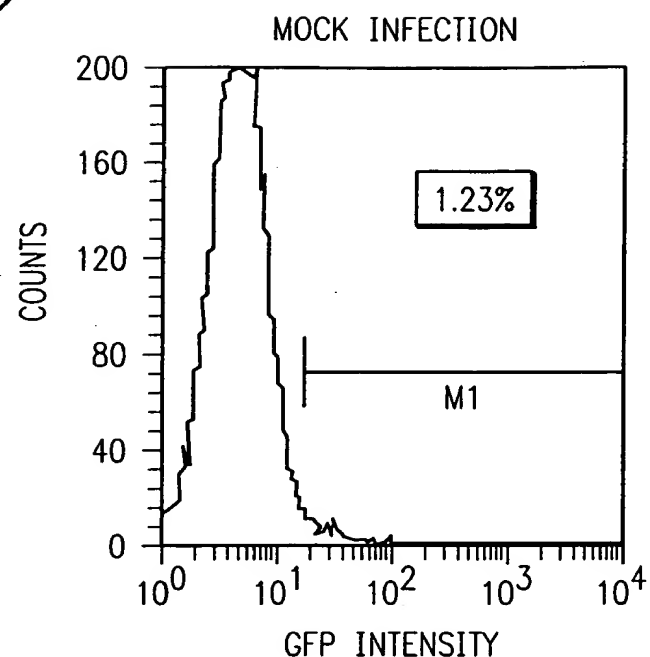


FIG. 23B

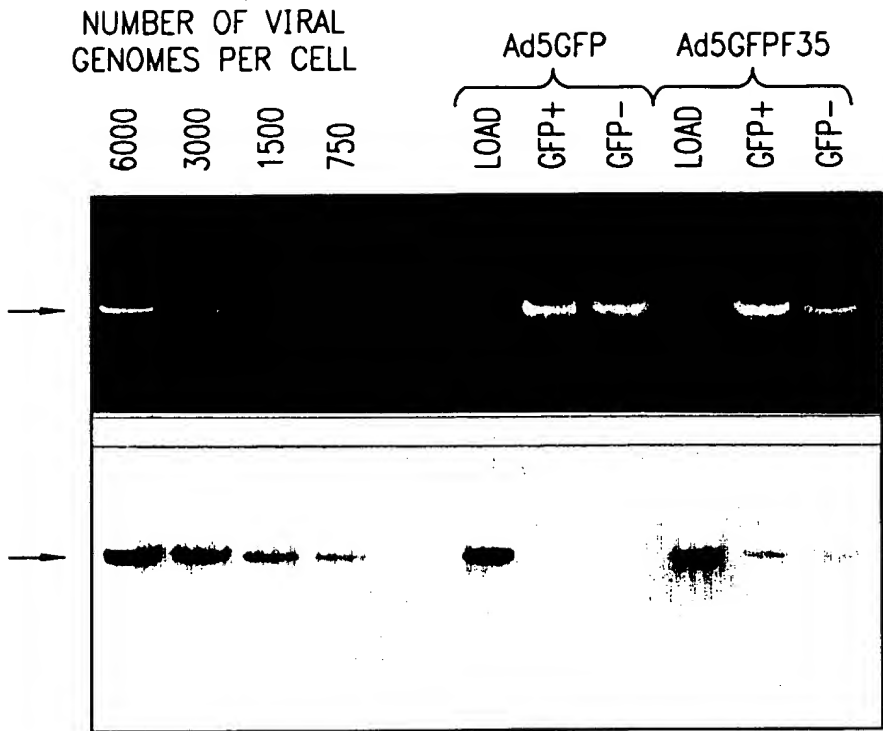


FIG. 24A

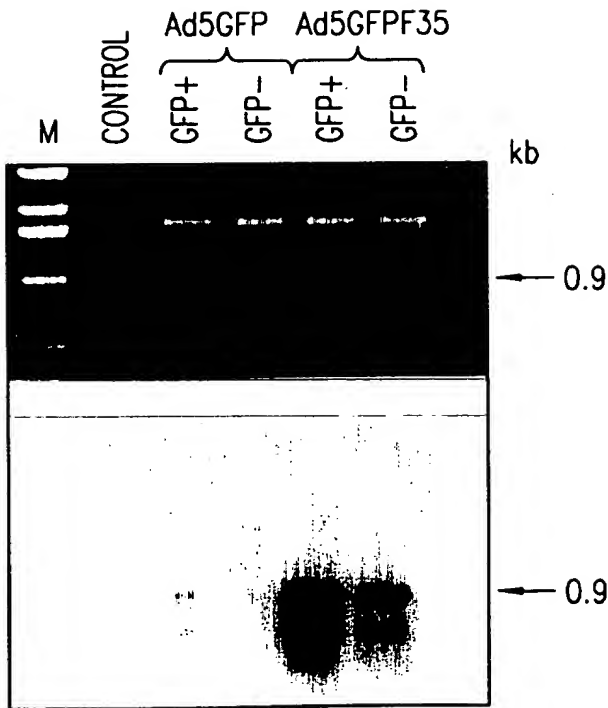


FIG. 24B

STRUCTURE AND FEATURES OF CHIMERIC ADENOVIRUS VECTORS.


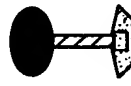

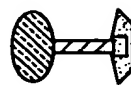

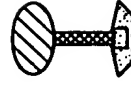
						
<u>Adeno vector</u>	Ad 5L	Ad 5S	Ad 5/9L	Ad 5/9S	Ad 5/35L	Ad 5/35S
<u>Binding to CAR</u>	YES	YES	YES	YES	NO	NO
<u>genome/PFU ratio</u>	13	143	29	582	17	14
<u>Attachment to/internalization into</u>						
293	+++	++	++	+/-	+++	+++
K562	-/+	--/+	--/+	---	+++	+++
Y79	++	+	+	+/-	+	+
<u>Gene transfer efficiency</u>						
293	+++	++	++	+/-	+++	+++
K562	-/+	--/+	--/+	---	+++	+++
Y79	++	+	+	+/-	+	+

FIG. 25

Top View of Adenovirus Type 5 Fiber Knob Domain

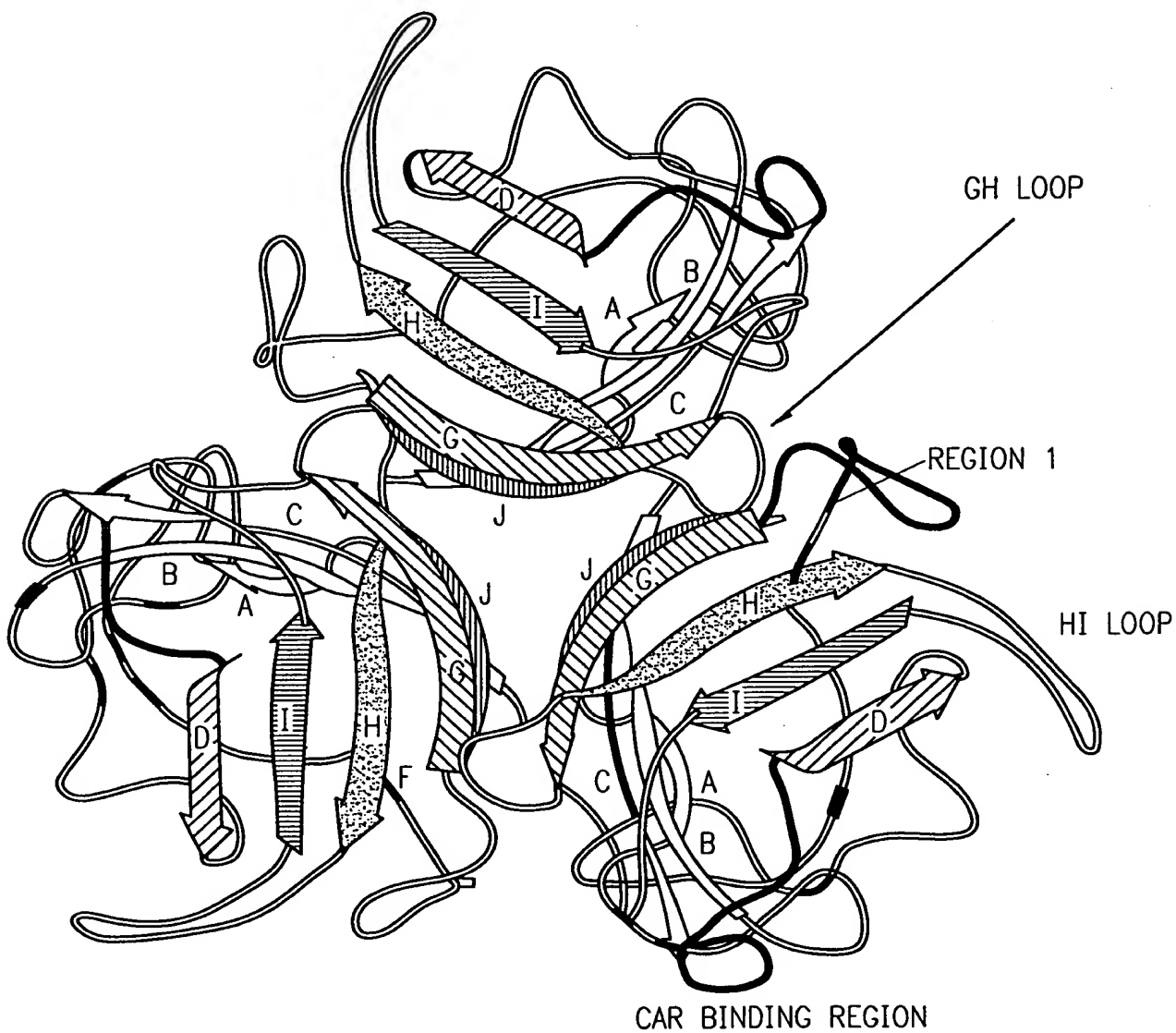
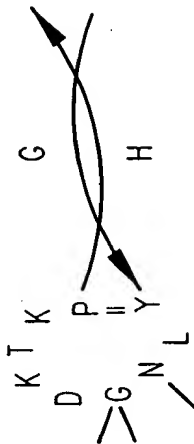


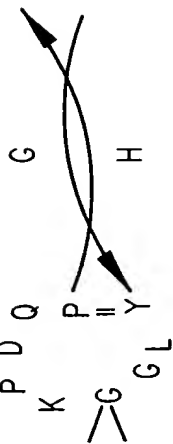
FIG. 26

Amino Acid Composition of Wt and Modified Adeno 5 GH-loop

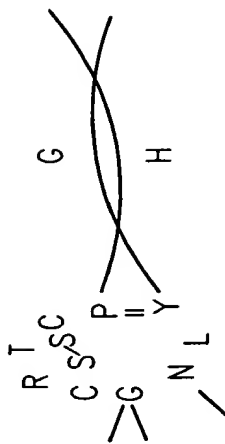
Adeno 5 wt GH-loop V Y] L N G D K T K [P V



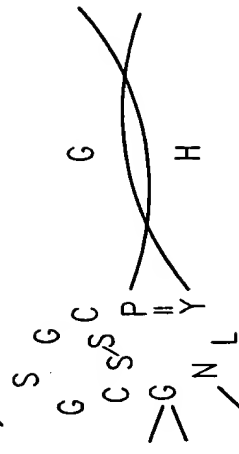
Adeno 5/9 GH-loop chimera V Y] L G G K P D Q [P V



Adeno 5 GH-Cys 1 V Y] L N G C G S C [P V



Adeno 5 GH-Cys 2 V Y] L N G C G S G C [P V



Adeno 5 GH-peptide V Y] L N G C G (X) G C [P V<sup>10</sup>

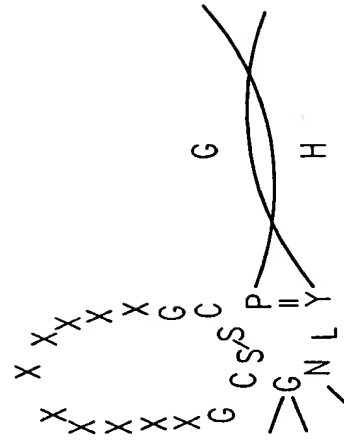


FIG. 27





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ATTACHMENT



INTERNALIZATION

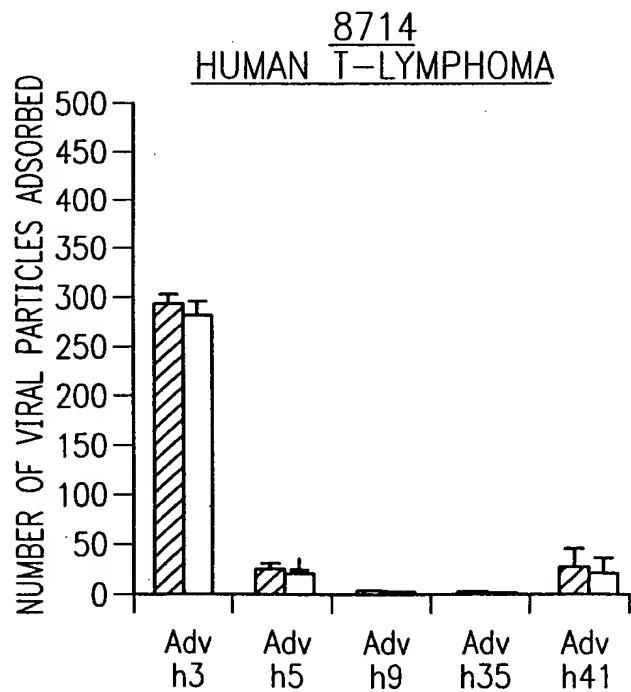
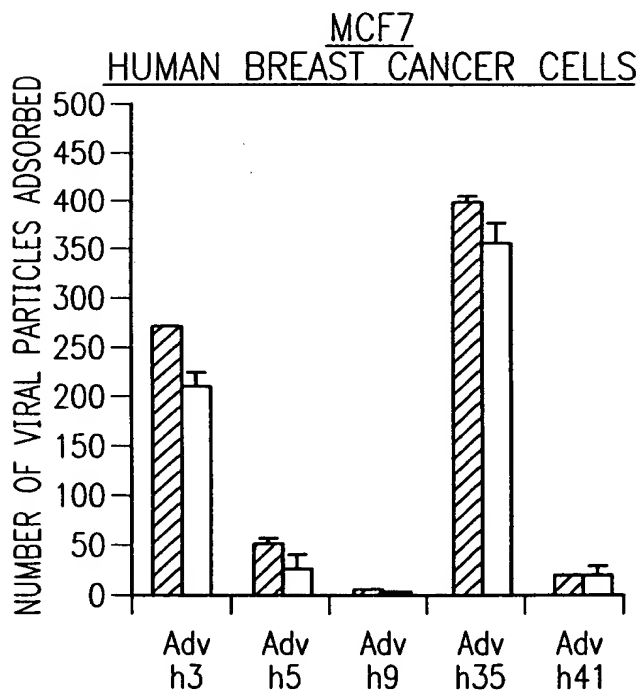
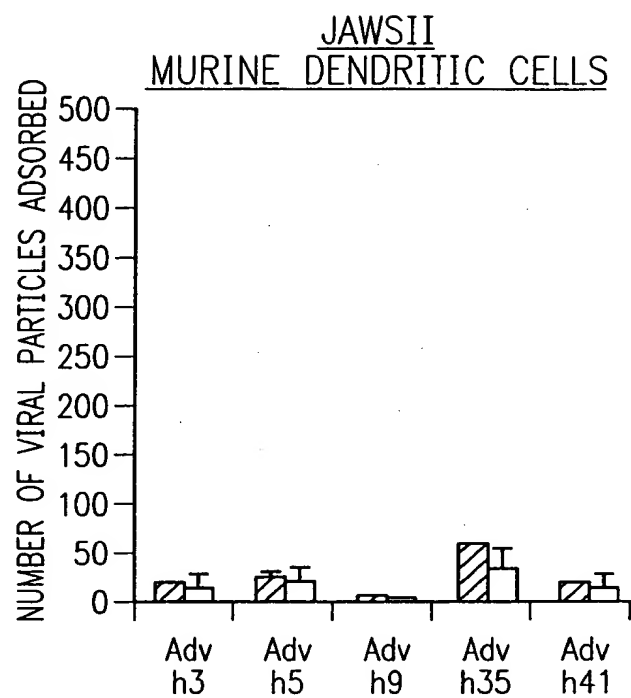
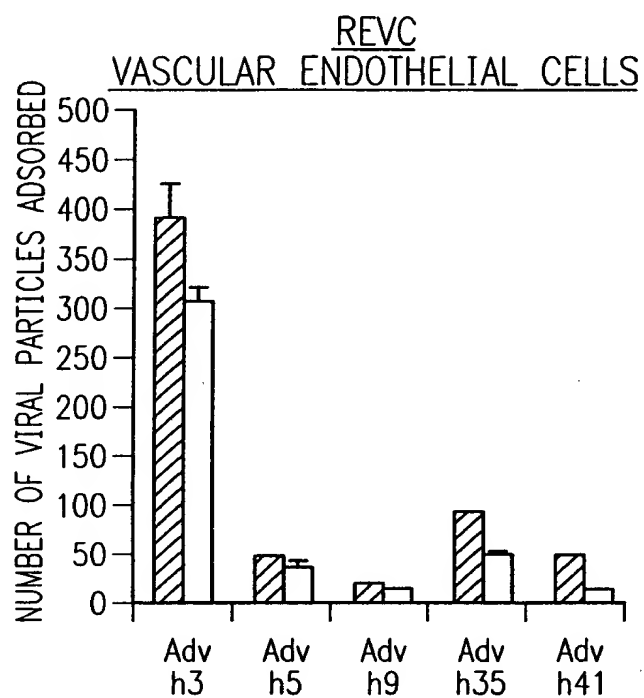


FIG. 28

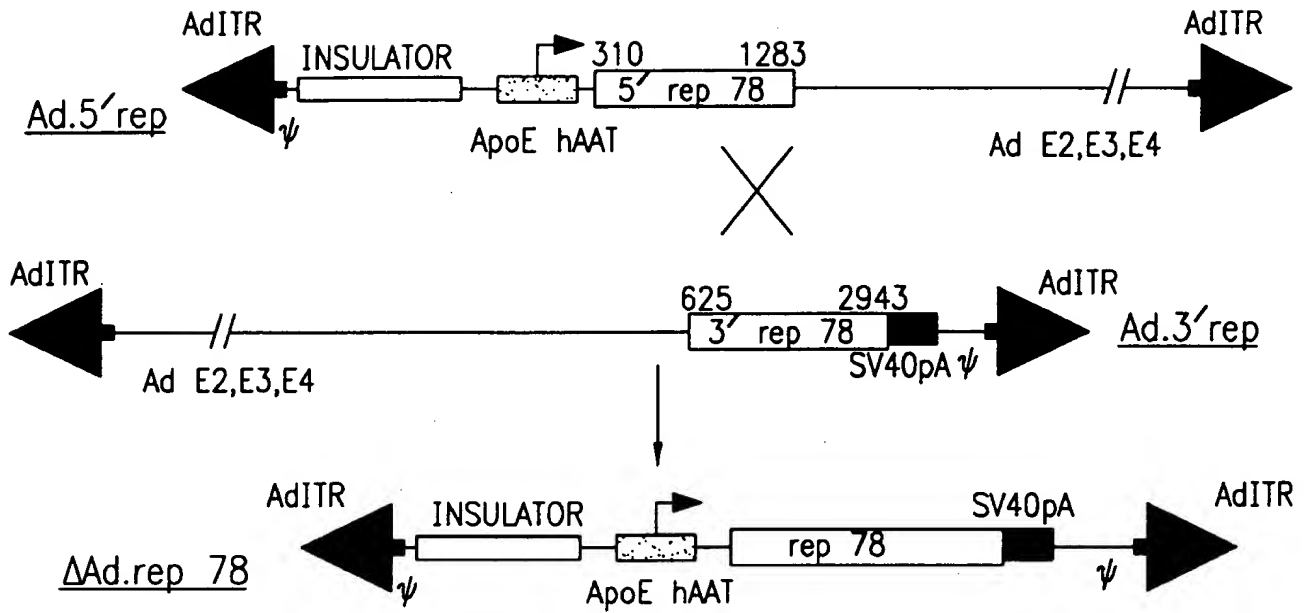


FIG. 29A

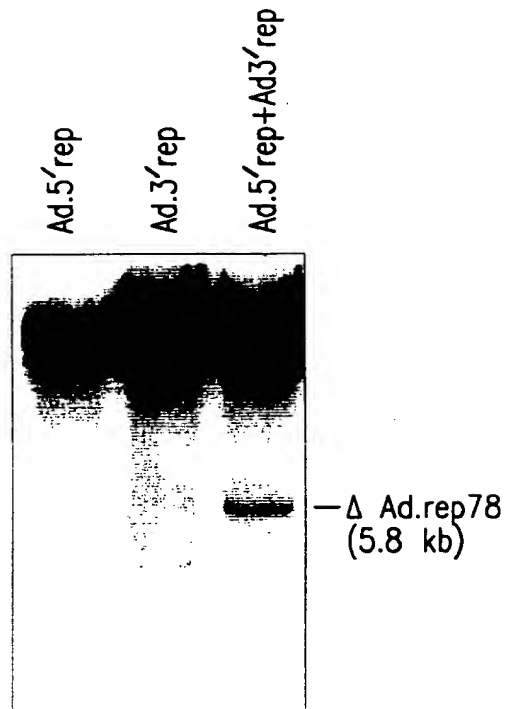


FIG. 29B

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-	-	+	-	+	+	Ad-Rep5' (virus)
-	-	-	+	+	+	Ad-Rep3' (virus)
-	+	-	-	-	-	pRep78 (plasmid)
+	+	-	-	-	-	Ad-helper

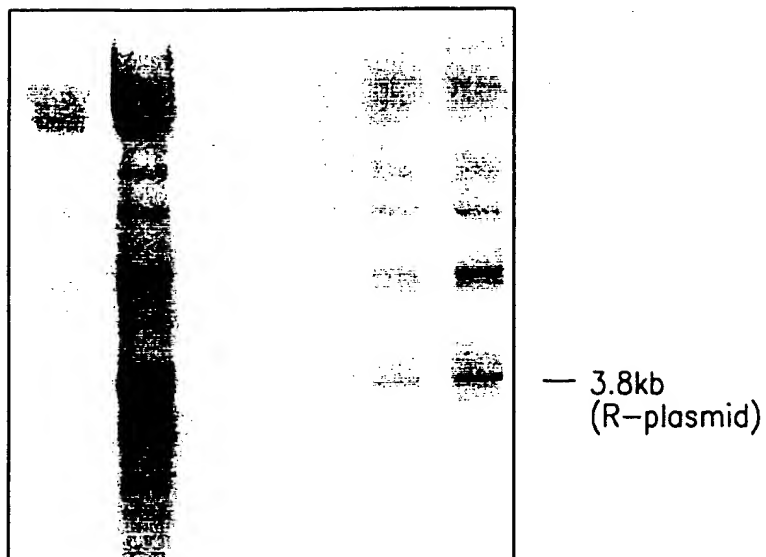


FIG. 29C

-	-	+	-	+	Ad-Rep5' (virus)
-	-	-	+	+	Ad-Rep3' (virus)
-	+	-	-	-	pRep78 (plasmid)

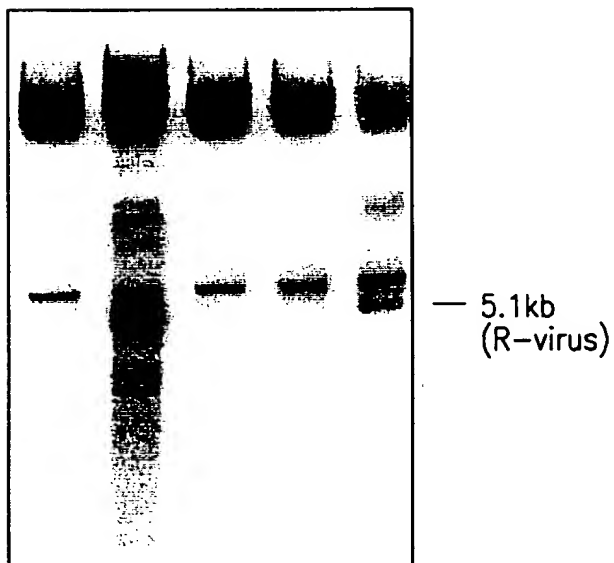


FIG. 29D